

**Office Of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
November 16, 2006**

Approval: *Jane A. Hedges*  
J. Hedges (H0-57)  
*Ecology IAMIT Representative, Chairperson*

Date: 1/18/07

Approval: *W. R. Eschenberg/Z. Smith*  
J. R. Eschenberg/Z. Smith (H6-60)  
*DOE IAMIT Representative*

Date: 1/29/07

Approval: *N. Ceto*  
N. Ceto (B1-46)  
*EPA IAMIT Representative*

Date: 18 JAN 07

Minutes Prepared by:

*Sonya Moore*  
S.L. Moore (H8-40)  
*Fluor Hanford, Inc.*

Date: 1-29-07

Barnes, M.	Ecology	H0-57	Kristofzski, J.G.	CH2M	H6-03*
Bartus, D.B.	EPA	H0-57	Liou, W.S.	ORP	H6-60
Bilson, H.E.	FH	H8-20	Louie, C.S.	ORP	H6-60*
Bohnee, G.	NPT*		Long, J.D.	ORP	H6-60
Boomer, K.D.	CH2M	H6-19	Luke, J.J.	CH2M	H6-03*
Braswell, S.M.	ORP	H6-60*	Lyon, J.J.	Ecology	H0-57*
Brown, M.J.	Ecology	H0-57*	McCormick, M.S.	RL	A5-11
Caggiano, J.A.	Ecology	H0-57	Nicoll, B.L.	ORP	H6-60
Ceto, N.	EPA	B1-46	Niles, K.	OOE*	
Chalk, S.	RL	A7-75	Olinger, S.J.	ORP	H6-60
Cimon, S.	ODE*		Parsons, G.L.	CH2M	T6-04
Clark, D.L.	ORP	H6-60*	Piippo, R.	FH H8-12*	
Cusack, L.J.	Ecology	H0-57*	Post, T.C.	EPA	B1-46*
Dahl, S.L.	Ecology	H0-57*	Price, J.B.	Ecology	H0-57
Einan, D.R.	EPA	B1-46	Quintero, R.A.	ORP	H6-60*
Engelmann, R.H.	FH	H8-12	Raymond, R.E.	CH2M	S7-83
Eschenberg, J.R.	ORP	H6-60	Russell, R.W.	ORP	H6-60*
Fort, L.	Ecology	H0-57*	Skimmarland, R.R.	Ecology	H0-57*
Fredenburg, E.A.	Ecology	H0-57	Smith, T.Z.	ORP	H6-60*
Furlong, P.T.	ORP	H6-60	Uziemblo, N.H.	Ecology	H0-57
Harris, S.	CTUIR*		Vance, J.G.	FH	H8-12*
Hedges, J.	Ecology	H0-57*	Voogd, J.A.	CH2M	H6-03*
Henry, D.	OOE*		Whalen, C.L.	Ecology	H0-57*
Horst, L.	OOE*		Wolf, A.	CTUIR*	
Huffman, L.A.	ORP	H6-60*	Administrative Record		H6-08*
Jackson, D.E.	RL	A4-52	*w/Attachment		
Jaraysi, M.N.	CH2M	H6-03			
Jentzen, B.K.	Ecology	H0-57			
Jim, R.	Yakama*				

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General Discussion

ORP distributed their 4<sup>th</sup> Quarter TPA milestone review handout. The information in these minutes reflects discussion based on that handout.

ORP stated that the annual baseline was approved and the contractor did a very good job of adhering to budget and schedule. There were significant cost and schedule variances and ORP is updating the baseline to reflect a more realistic view of the path forward. Scope deferred in FY 2006 due to funding issues includes TRU packaging and shipping. The earliest these activities would start ramp up would be 2010. There was also a carry over from 2006 to 2007 of about \$12M. Ecology asked how much money was spent on TRU packaging and ORP responded essentially none. EPA expressed concern over the time required to complete design and construction of a TRU facility plus the risk of start up vs. time required to build new tanks.

**M-045-00, Complete Closure of all Single-Shell Tank Farms**

M-045-00B was missed. Five of 16 tanks have been retrieved; C-204 is expected to be complete in December and C-108 in January or February.

M-045-00C was missed. ORP is working with a TPA retrieval team and has been presented with a set of alternatives that are currently being evaluated. Ecology noted that milestones were not to be negotiated in these retrieval team meetings.

ORP has completed High Resolution Resistivity (HRR) injection testing at S Farm and a completed report was submitted to Ecology in September. The testing resulted in two recommendations for a path forward; 1) adopt HRR as the primary leak detection method at S-Farm only, or 2) do additional testing at C-Farm to confirm viability of injection information. Ecology asked what the time frame would be for additional testing as S-Farm took a couple of years. ORP would like to get this done as soon as possible when funding is available, but needs to line out a plan to perform testing.

Ecology noted they are not receiving data on C-103, groundwater, and the use of HRR. ORP understands that Ecology receives the routine groundwater monitoring reports, but believes the information included in the reports is several months behind. Ecology states there is no data in the reports for January-March on C-Farm. Although ORP believes they have been responsive to the requirements in Tank Waste Retrieval Work Plans (TWRWPs) and the TPA, Ecology stated that submitting a report without data is not being responsive. ORP recently sent an email to Ecology identifying a Point Of Contact to ensure they receive the information they need.

Action: Ecology stated that by the next quarterly review (February 2007) this issue is to be totally resolved.

Ecology stated that the dates in the 'Start' column in the Retrieval Summary Schedule on page 48 of the handout are not acceptable to the State. Ecology believes ORP should be able to start retrieval on additional tanks. Currently the schedule shows only one start in 2007 and 2008, and none in 2009 or 2010. This is not acceptable to EPA either.

ORP has received an advanced copy of letter from Ecology to revise the Tank Waste Retrieval Work Plans (TWRWPs) and re-submit by December 8. ORP is not sure how they will respond to this.

Planned Activities – ORP is near completion of the project plan for the C-200 demonstration project; public comment will begin soon.

### **SST Retrieval Sequence Document**

ORP received a letter from Ecology requesting a meeting, which was held on November 9. A tentative path forward was identified to revise and resubmit the document before Christmas.

### **Tank 241-C-106**

Ecology asked when ORP expects to have the revisions to C-106 Appendix H ready for submittal to NRC. Ecology also asked what the timing is for the NRC at this point. ORP stated the NRC is available to review the documents and this would be good time to get them in.

Ecology and EPA are discussing revising the Appendix H exception request to include the SST PA into the discussion analysis. Ecology stated ORP needs to resolve the comments received and resubmit.

### **Tank 241-S-102**

ORP submitted the retrieval completion plan to Ecology in response to their request. The pump at the bottom of the tank was restarted and ~14K gallons of waste was retrieved. When the retrieval efficiency went down, the pumping was stopped and a different strategy to remove additional waste is being evaluated. In 2007 ORP will be able to get a good deal of waste out of the tank and will then deploy the mobile retrieval tool. ORP stated there is a great deal of uncertainty because this tool has not yet been used in a tank. ORP has statused the milestone as at risk because time is needed to operate the equipment.

Ecology indicated they asked for and received a recovery plan but it does not have any dates in it, which makes it difficult to have an understanding of when the work will be completed. ORP stated they are reluctant to commit to certain dates because of

uncertainty of how the equipment will perform. ORP has spent a great deal of resources working this issue. Ecology asked when the last time waste was withdrawn from S-102. ORP responded that it had been 16 days, but before that it was 9-10 months.

EPA stated that ORP has missed two milestones and yet there still are no dates for completion. ORP asked that they consider this is R&D work and the possibility of determining firm dates is a highly risky process. EPA is seeing an increased pattern of missed milestones and ORP's request is to change the milestone due dates. Ecology understands the difficulties using new technologies, but that shouldn't stop ORP from establishing start dates for the work.

### **Tank 241-S-112**

ORP is in the process of completing volume calculations; the tank is close to the limit. Once the calculations are complete, ORP will decide on a path forward.

### **M-045, -050, -060, Single-Shell Tank Corrective Action**

M-045-55-T03 – Ecology stated that ORP needs to include their responses into the roll up report.

M-045-55-T04 – Ecology asked that they change 'negotiations' to 'discussions.'

M-045-55 – Ecology and ORP need to meet again before the February quarterly meeting. The goal is to get some resolution to the Change Request (CR) because the 110-day notification date has already passed. Both sides are willing to work on the CR, but this needs to be done by 1-31-07.

M-045-58, and -60 – comments are the same as for M-045-55.

Significant Accomplishments – The Surface geophysical Exploration of the S Tank Farm represents the first fully integrated deployment of the technology between ORP, FH and CH2M Hill. It worked well and is a good example for future integration work.

Issues – The Surface Geophysical Exploration (SGE) HRR will be used to quantify the constituents of the subsurface and to evaluate the extent of the plume. It may be a good tool to use to target where to take additional samples. EPA wants to make sure this issue is being worked with FH as they are the integrator for groundwater. FH is having a peer review in the January-February time frame and experts will be used to build on the 2004 techniques. EPA wants to be sure the Regulators are involved with the peer review meetings. ORP stated that the Regulators had been involved.

Ecology asked for the status of the T farm pump and treat work. ORP will take an action to respond with this information the week after Thanksgiving.



## **M-090-00, Complete Acquisition of New Facilities, Modifications of Existing Facilities, and/or Modifications of Planned Facilities**

M-090-10 – ORP stated they are transitioning to a care and custody mode. Ecology has an issue with ORP identifying this as on schedule as they don't believe the facility will be ready to receive waste by the due date. The risk budget tool needs to be approved by Ecology and this is dependent on obtaining a permit revision. ORP will take an action to get a better understanding of this issue.

M-090-11 – ORP has received a report from CH2M Hill and submitted an official letter to Ecology stating they are going into a care and custody mode. Ecology stated ORP should place this milestone at risk because the facility will not be ready to receive waste by the due date. ORP stated they were on schedule to get the permit changed before April.

Planned Actions – ORP stated they have the initial draft of the IWTRD but they don't have all the info needed to complete the document. The documents will be delivered in January 2007 or as agreed to by the parties with a verbal change. The permit modifications will change this requirement and will go out for public comments. Ecology stated the analysis for this document needs to be consistent with EIS work ongoing.

## **M-023-00, Tank Integrity and Monitoring**

The only activity left to complete this milestone is 241-BY-ITS-1 and ORP expects to be completed in December or January. Ecology asked if ORP will be sending a report. ORP stated there are reports for the other video assessments and they will also have one for this activity. Ecology asked for a list of what activities have been done to support M-023. They also want to be sure they will receive a report and video assessment of 241-BY-ITS-1, as has been the case for the other activities under this milestone.

## **Interim Stabilization Consent Decree**

ORP stated that S-112 is very close to being retrieved and retrieval work is continuing on S-102. ORP is performing retrieval activities as resources are available and will continue to perform these activities. EPA noted there were 29 tanks that had been pumped down, but asked if ORP were to enter the tanks would they find additional liquids. ORP stated they should not because the tanks are still being monitored. It was noted that this question came up in the State of the Site meeting. The regulators expressed concern over the need to communicate status clearly and consistently at all times. ORP stated all tanks are monitored at a specified period and that they pump until there is confidence that levels have been met and will continue to be met.

Ecology brought up the fact that five tanks have volumes beyond IS levels and that the number of these tanks is increasing in a rate considered significant. ORP stated that when the level of liquid changes the monitoring devices provide a response. OSD-31 is

the procedure that specifies monitoring requirements. Ecology expressed concern about the ability and the frequency of Tank Farms to monitor SSTs for instusion and leaks.

#### **M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes**

M-062-08 was missed.

Ecology asked for copy of the PDSA; ORP stated that it has not yet been released but they will check into the availability of a copy. The regulators also asked where the bulk vitrification project was obtaining its funding.

#### **Pretreatment Facility**

ORP is planning on additional melter tests and reducing particle size tests scheduled for 2007. Ecology asked where the funding is coming from; ORP stated it was from underruns from 2006 for all of ORP.

ORP stated that until the Secretary verifies the seismic information is adequate, funding is not available to continue with construction or procurement. The Earned Value Management System certification audit results will be used to provide this information. ORP has re-sequenced their schedule to allow work to continue while completing design.

ORP is also working on verifying structural design to the new criteria. The re-sequencing is beginning to impact vessels, nozzles, and racks as it relates to the load they can handle. The original racks may not be large enough to accommodate the loads. PNL is set up to test the Multiple Overblow (MOB) and is expected to start early- to mid-December.

The factory acceptance test on the bridge crane identified some concern with the remote manipulator. The controls are mechanical which makes it hard to line up with the flexible jumper connectors so additional work may be needed.

M-62-03 – The RCRA delisting petition will be submitted on schedule. EPA requested that D.Bartus be notified on the status of this issue.

Tri-Party Agreement  
Quarterly Milestone Review Meeting  
November 16, 2006



U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

4<sup>th</sup> Quarter of FY 2006

## Agenda

Office of River Protection  
Tri-Party Agreement  
Quarterly Milestone Review Meeting  
Ecology Offices  
November 16, 2006  
9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
3 13	<ul style="list-style-type: none"> <li>TPA Milestone Statistics</li> <li>FY 2006 ORP TPA Cost &amp; Schedule Performance (CHG)</li> </ul>	Woody Russell / Suzanne Dahl / Jeff Lyon	9:00
46	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:10
55	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:40
57	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Diane Clark / Les Fort	10:00
59	M-48-00, DST Integrity Assessment Program	Cathy Louie / Vic Callahan / Les Fort	10:10
65	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Cathy Louie / Bud Derrick	10:20
	<b>BREAK</b>		
61	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
62	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
63	In Tank Characterization and Summary	John Long / Michael Barnes	10:40
76	M-62-08 Bulk Vitrification/Supplemental Technologies	Jim Thompson/Suzanne Dahl	10:50
67	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Suzanne Dahl	11:10

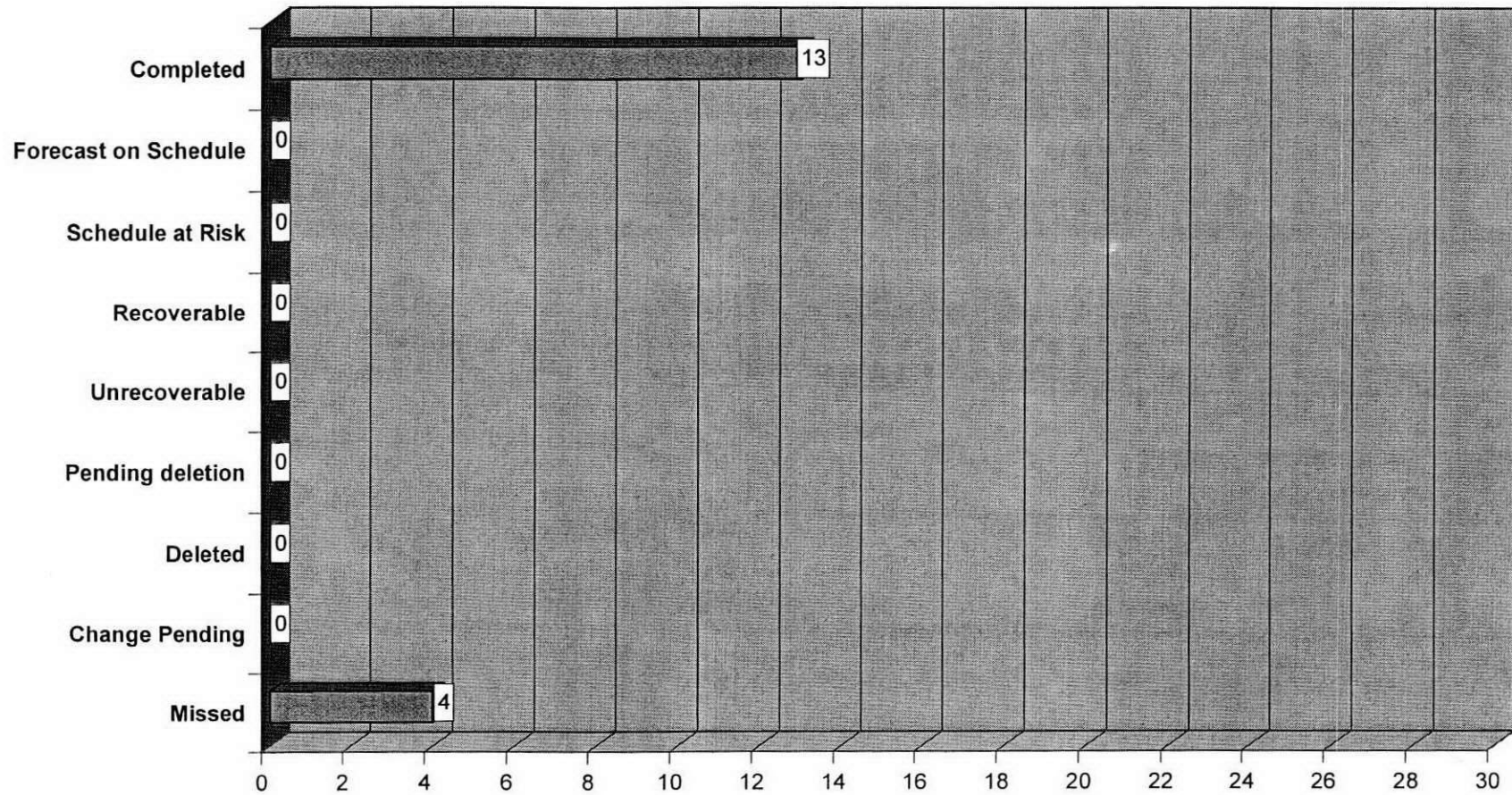
**TPA Milestone Statistics**

(Including target milestones)

Milestone	Due Date	Total Active as of 03/31/06	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-23-25, Tank Integrity and Monitoring	03/31/05 (M-23-25)	0				
M-23-27, Complete 244-CR Liquid Level Assessment	12/30/04	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-43-00, Complete Tank Farm Upgrades	06/30/05 (M-43-00)	0				
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	31	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02N M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-05-T10 M-45-05-T11	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/08 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 09/30/12 09/30/13	M-45-05-T12 M-45-05-T13 M-45-05-T14 M-45-05-T15 M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-55 M-45-56 M-45-58 M-45-59 M-45-60	09/30/14 09/30/15 09/30/16 09/30/17 09/30/24 03/31/12 03/31/14 12/31/07 12/31/07 01/31/07 TBD 06/30/07 TBD 09/30/07
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	5	M-47-00 M-47-02 M-47-03A	02/28/18 03/31/09 03/31/09	M-47-04 M-47-06	03/31/09 06/30/10
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	9	M-62-00 M-62-00A M-62-01M M-62-03	12/31/28 02/28/18 07/31/06 12/31/06	M-62-07B M-62-08 M-62-09 M-62-10 M-62-11	12/31/07 06/30/06 02/28/09 01/31/11 06/30/07
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	3	M-90-00 M-90-10 M-90-11	TBD 08/31/08 08/31/10		
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	09/30/07	4	M-48-00 M-48-15	09/30/07 09/30/07	M-48-07A M-48-07B	06/30/06 06/30/06
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
<b>Total Active Milestones:</b>		<b>57</b>				



## FY 2006 MILESTONE PERFORMANCE



Fiscal Year 2006 Tri-Party Agreement Milestone Status											
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R26	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	10/31/05	10/31/05								
M-048-07A-A	Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service by October 31, 2005. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-A.	10/31/05	10/31/05								
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	12/15/05								
M-062-01L	Submit Semi-Annual Project Compliance Report	01/31/06	01/31/06								
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix I, Section 2.1.2), double shell tank space evaluation document and Ecology concurrence of additional tank acquisition.	3/1/06	3/13/06								
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary. This scheduled deliverable is a subset of M-48-	3/31/06	3/30/06								

## Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	07A, and thus labeled as M-48-07A-B										
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System	3/31/06	3/31/06								
M-047-05A	Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).	4/30/06	02/2/05								
M-045-55-T04	Submit To Ecology For Review And Comment A Draft Field Investigation Report Combining The Results Of Field Investigations And Analysis For WMAs A-AX, C & U Pursuant To The Site-Specific SST WMA Phase 1 RFI/CMS Work Plan Addenda For WMA A-AX, C And U. As part of the Phase 2 Vadose Zone project renegotiations, being developed, this target milestone scope will be included in M-45-55 Phase 1 Rollup documentation due in 1/07. Project continues to complete field characterization activities per approved workplan, but will defer stand alone paper study for additional characterization during phase 1.	04/30/06						X			X
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M 48-07A-B]; and 3) complete	06/30/06	06/28/06								

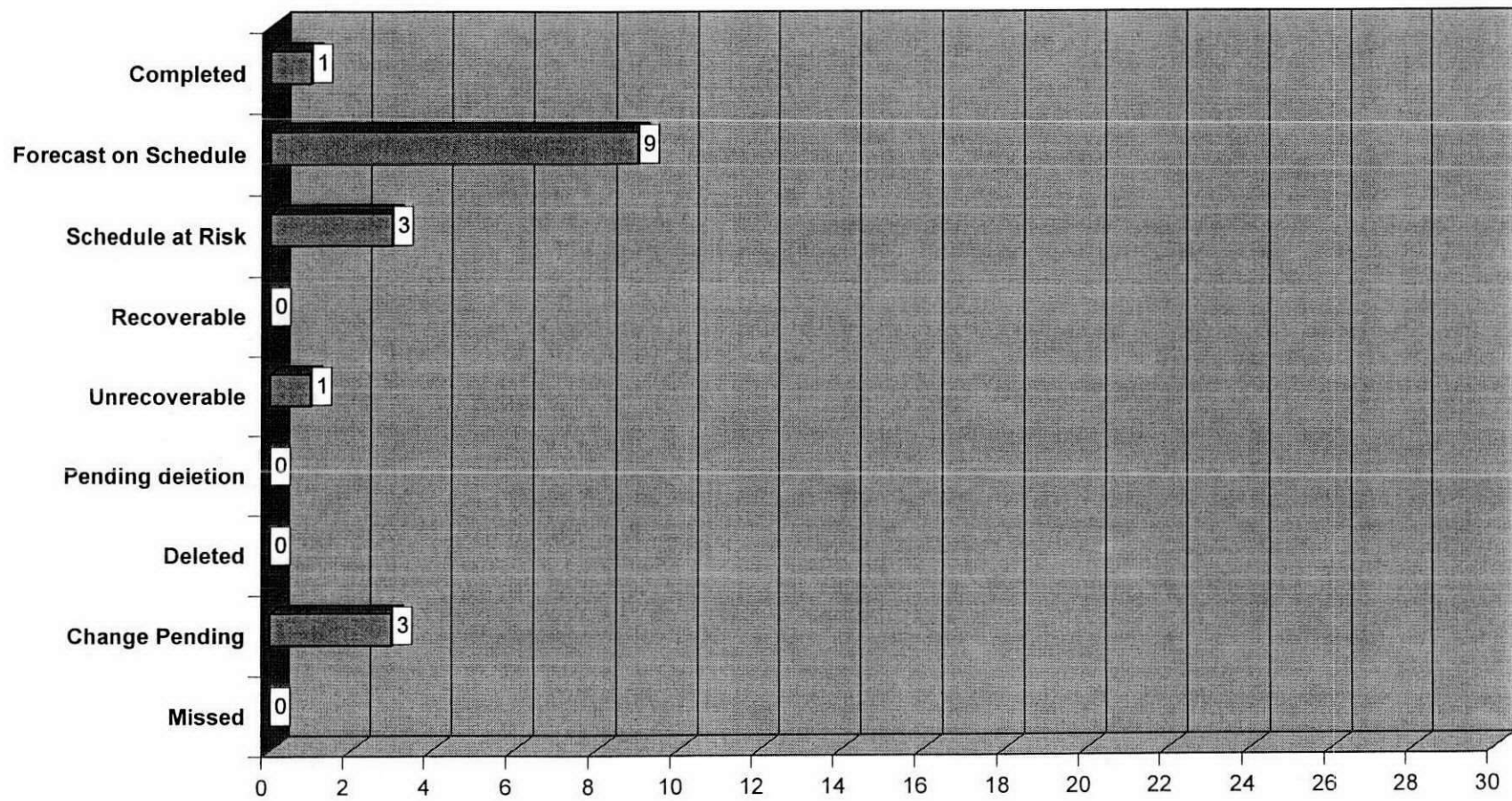


## Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	construction of SY-B Valve Pit upgrade [see M 48-07A-C].										
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	06/30/06	06/08/06								
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06	6/27/06								
M-062-08	Submittal Of Hanford Tank Waste Supplemental Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline, And Draft Negotiations Agreement In Principle (AIP).	06/3/06						X			
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06	09/05/06								
M-062-01M	Submit Semi-Annual Project Compliance Report	07/31/06	07/31/06								
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SSTs pursuant to the agreement criteria in milestone M-45-00.	09/30/06						X			
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the	09/30/06						X			

Fiscal Year 2006 Tri-Party Agreement Milestone Status											
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	period February 07 through August 08).										

## FY 2007 MILESTONE PERFORMANCE



## Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW	12/31/06		X							
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07			X						
M-062-01N	Submit Semi-Annual Project Compliance Report	01/31/07		X							
M-045-55	Submit to Ecology For Review And Approval as an Agreement Primary Document a Phase I RFI Report integrating results of data gathering activities and evaluations for all SST WMAs.	01/31/07									X
D-001-00-R31	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period	01/31/07		X							

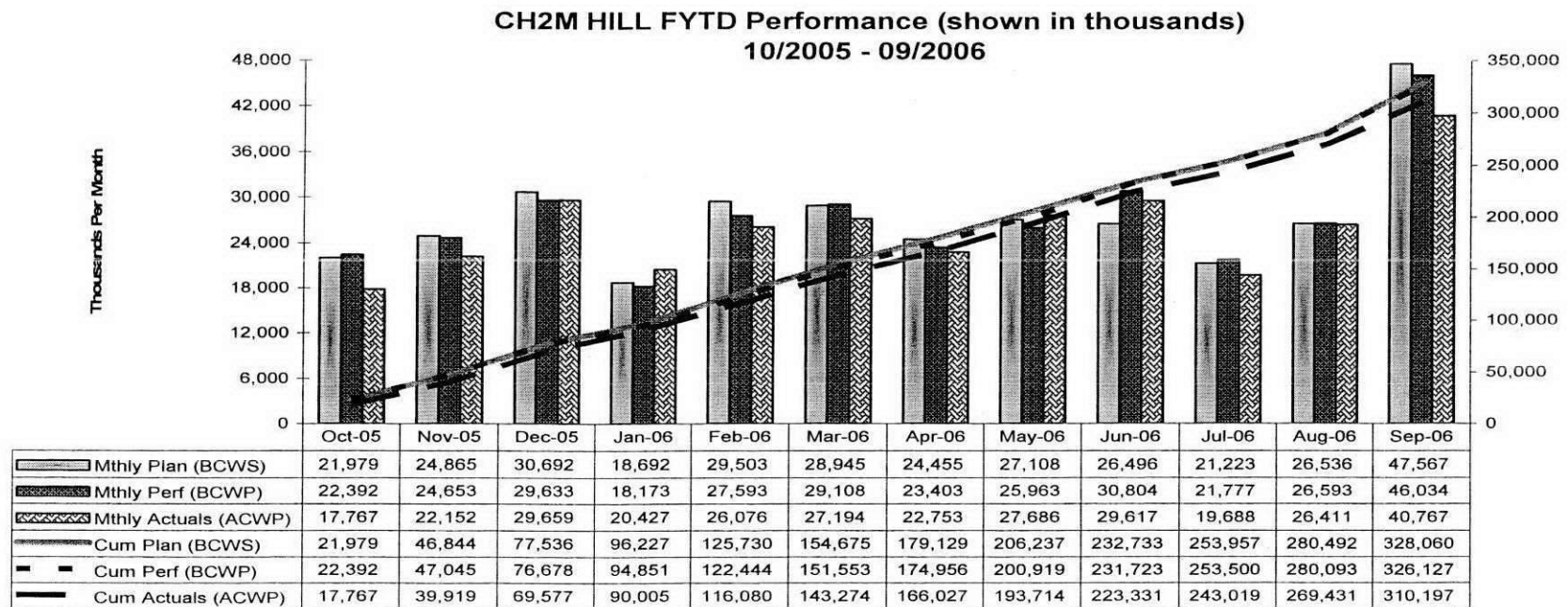
## Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.										
M-045-05A	Complete Waste Retrieval from S-102	3/31/07			X						
D-001-00-R32	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	04/30/07		X							
M-045-58	Submit to Ecology for review and approval as an Agreement Primary Document a corrective measures study for interim corrective measures (pending results and conclusions in the Phase 1 RFI report- Milestone M-45-55 or subsequent RFI reports).	06/30/07									X
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07					X				
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of	07/01/07		X							

## Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	information, and the need for the establishment of additional agreement interim measures.										
D-001-00-R33	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	07/31/07		X							
M-062-010	Submit Semi-Annual Project Compliance Report	07/31/07		X							
M-045-60	Submit to Ecology for review and approval as an Agreement Primary Document DOE's RFI/CMS work plan for all SST WMAs.	09/30/07									X
M-048-15	Submit a report to Ecology for the re-examination of six (6) DSTs by ultrasonic testing in all areas previously examined to provide comparative data from which to calculate corrosion rates in each of the six DSTs examined.	09/30/07		X							
M-045-05-T05	Initiate tank retrieval from five additional Single-Shell tanks.	09/30/07			X						
M-048-00	Complete Tank Integrity Assessment activities for Hanford's Double Shell Tank (DST) system.	09/30/07		X							

## FISCAL-YEAR-TO-DATE PERFORMANCE – GRAPH



BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform



## FISCAL-YEAR-TO-DATE PERFORMANCE - CHART

**CH2M HILL Hanford Group, Inc.**  
**FISCAL-YEAR-TO-DATE PERFORMANCE - 10/2005 - 09/2006**  
**BY WORK BREAKDOWN STRUCTURE**  
**Dollars in Thousands**

		Cumulative Fiscal-Year-To-Date									
WBS	TITLE	Budgeted Cost		Actual Cost Work Performed	Variance				Budget at Completion (BAC)	Estimate at Completion (EAC)	
		Work Scheduled	Work Performed		Schedule	SV %	Cost	CV %			
5.07	BASE OPERATIONS - Excluding 5.07.02	157,513.1	157,509.8	146,408.9	(3.3)	0.0%	11,100.9	7.0%	157,513.1	146,408.9	
5.07.02	Env/TPA Milestone Achievement	<u>20,083.8</u>	<u>19,813.2</u>	<u>19,953.9</u>	<u>(270.6)</u>	-1.3%	<u>(140.7)</u>	-0.7%	<u>20,083.8</u>	<u>19,953.9</u>	
	TOTAL BASE OPERATIONS	<u>177,596.9</u>	<u>177,323.0</u>	<u>166,362.9</u>	<u>(273.9)</u>	-0.2%	<u>10,960.1</u>	6.2%	<u>177,596.9</u>	<u>166,362.9</u>	
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS elements	0.0	0.0	(15.4)	0.0	0.0%	15.4	0.0%	0.0	(15.4)	
5.08.02	WTP Feed Delivery Program	7,377.6	7,377.6	6,425.1	(0.0)	0.0%	952.5	12.9%	7,377.6	6,425.1	
5.08.03.02	10 DST Retrieval Systems (W-211)	1,676.3	1,676.3	2,164.2	0.0	0.0%	(487.9)	-29.1%	1,676.3	2,164.2	
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	3,026.7	3,120.4	160.9	5.6%	(93.6)	-3.1%	2,865.8	3,120.4	
5.08.04.02	Upgrade Transfer System (E-525)	2,712.4	2,712.4	3,053.2	(0.0)	0.0%	(340.9)	-12.6%	2,712.4	3,053.2	
5.08.05	Retrieval / Closure Program	50,620.2	51,852.1	45,789.9	1,231.8	2.4%	6,062.2	11.7%	50,620.2	45,789.9	
5.08.06/7	SST Retrieval East / West Area	23,417.2	20,839.2	24,083.3	(2,578.0)	-11.0%	(3,244.1)	-15.6%	23,417.2	24,083.3	
5.08.12/13	SST Closure	<u>458.8</u>	<u>446.5</u>	<u>362.5</u>	<u>(12.4)</u>	-2.7%	<u>84.0</u>	18.8%	<u>458.8</u>	<u>362.5</u>	
	TOTAL RETRIEVE AND CLOSE	<u>89,128.3</u>	<u>87,930.6</u>	<u>84,983.1</u>	<u>(1,197.6)</u>	-1.3%	<u>2,947.5</u>	3.4%	<u>89,128.3</u>	<u>84,983.1</u>	
5.09	TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements	3,998.1	3,918.1	3,488.5	(80.0)	-2.0%	429.5	11.0%	3,998.1	3,488.5	
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.7	0.0	0.0%	(65.7)	0.0%	0.0	65.7	
5.09.02.03/05	LAW Treatment	27,357.7	27,357.7	30,173.5	0.0	0.0%	(2,815.8)	-10.3%	27,357.7	30,173.5	
5.09.03.01	Integrated Disposal Facility	7,174.3	7,132.9	5,635.2	(41.4)	-0.6%	1,497.7	21.0%	7,174.3	5,635.2	
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>109.4</u>	<u>109.4</u>	<u>34.4</u>	<u>(0.0)</u>	0.0%	<u>75.0</u>	68.6%	<u>109.4</u>	<u>34.4</u>	
	TOTAL TREAT AND DISPOSE WASTE	<u>38,639.5</u>	<u>38,518.1</u>	<u>39,397.3</u>	<u>(121.4)</u>	-0.3%	<u>(879.2)</u>	-2.3%	<u>38,639.5</u>	<u>39,397.3</u>	
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>22,694.9</u>	<u>22,354.8</u>	<u>19,454.1</u>	<u>(340.0)</u>	-1.5%	<u>2,900.7</u>	13.0%	<u>22,694.9</u>	<u>19,454.1</u>	
RPP TOTAL		<u>328,059.6</u>	<u>326,126.5</u>	<u>310,197.4</u>	<u>(1,933.0)</u>	-0.6%	<u>15,929.1</u>	4.9%	<u>328,059.6</u>	<u>310,197.4</u>	

BCWS = Budgeted Cost For Work Scheduled

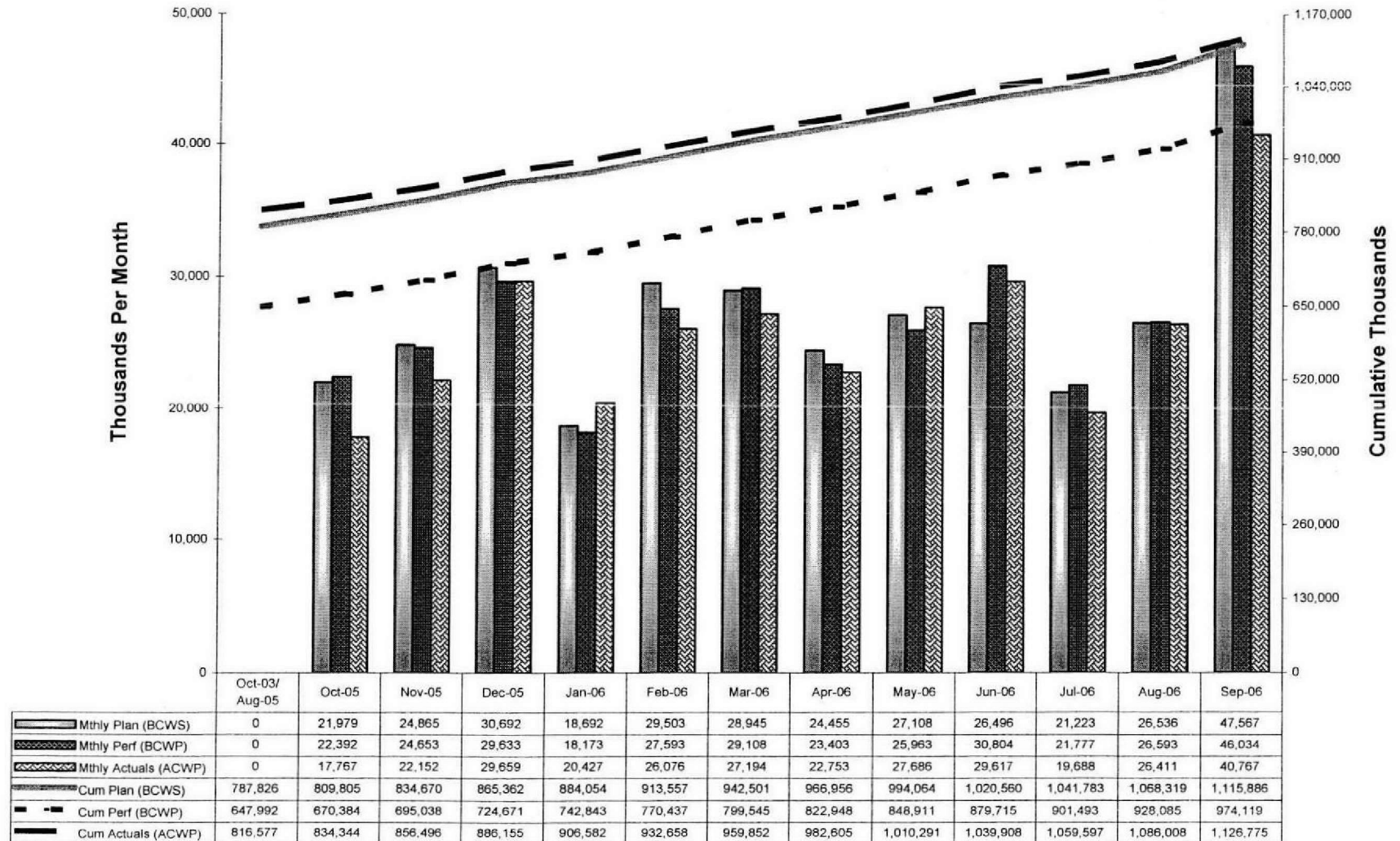
BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform



# CUMULATIVE COST/SCHEDULE PERFORMANCE - GRAPH

CH2M HILL Performance Cost/Schedule (shown in thousands)  
10/2003- 09/2006



BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform

# CUMULATIVE COST/SCHEDULE PERFORMANCE - CHART

## CH2M HILL Hanford Group, Inc. CUMULATIVE PERFORMANCE MEASUREMENT - 10/2003 - 09/2006 BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

WBS	TITLE	Cumulative Program-To-Date							
		Budgeted Cost			Variance				Budget at Completion (BAC) *
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %	
5.07	BASE OPERATIONS - Excluding 5.07.02	417,842.2	414,457.5	418,680.8	(3,384.7)	-0.8%	(4,223.3)	-1.0%	417,842.1
5.07.02	Env/TPA Milestone Achievement	<u>78,040.6</u>	<u>69,029.3</u>	<u>60,557.3</u>	<u>(9,011.3)</u>	-11.5%	<u>8,472.0</u>	12.3%	<u>78,040.6</u>
	TOTAL BASE OPERATIONS	<u>495,882.8</u>	<u>483,486.8</u>	<u>479,238.1</u>	<u>(12,396.0)</u>	-2.5%	<u>4,248.7</u>	0.9%	<u>495,882.7</u>
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS elements	8,925.6	9,039.0	8,395.1	113.4	1.3%	643.9	7.1%	8,925.6
5.08.02	WTP Feed Delivery Program	28,822.6	28,837.4	37,176.7	14.8	0.1%	(8,339.3)	-28.9%	28,822.6
5.08.03.02	10 DST Retrieval Systems (W-211)	28,407.3	19,181.0	21,271.6	(9,226.3)	-32.5%	(2,090.6)	-10.9%	28,407.3
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	37,633.4	34,629.7	41,683.6	(3,003.7)	-8.0%	(7,053.9)	-20.4%	37,633.4
5.08.04.02	Upgrade Transfer System (E-525)	17,307.8	14,165.1	26,780.2	(3,142.7)	-18.2%	(12,615.1)	-89.1%	17,307.8
5.08.05	Retrieval / Closure Program	140,848.9	131,668.8	145,723.5	(9,180.1)	-6.5%	(14,054.7)	-10.7%	140,848.9
5.08.06/7	SST Retrieval East / West Area	117,041.4	59,656.3	139,548.2	(57,385.1)	-49.0%	(79,891.9)	-133.9%	117,041.4
5.08.12/13	SST Closure	<u>17,122.9</u>	<u>7,249.6</u>	<u>10,640.1</u>	<u>(9,873.3)</u>	-57.7%	<u>(3,390.5)</u>	-46.8%	<u>17,122.9</u>
	TOTAL RETRIEVE AND CLOSE	<u>396,109.9</u>	<u>304,426.9</u>	<u>431,219.0</u>	<u>(91,683.0)</u>	-23.1%	<u>(126,792.1)</u>	-41.6%	<u>396,109.9</u>
5.09	TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements	26,020.8	23,219.5	18,197.6	(2,801.3)	-10.8%	5,021.9	21.6%	26,020.8
5.09.02.02	TRU / LLW Packaging	28,343.4	11,695.5	19,883.7	(16,647.9)	-58.7%	(8,188.2)	-70.0%	28,343.4
5.09.02.03/5	LAW Treatment	64,252.2	52,596.4	92,195.9	(11,655.8)	-18.1%	(39,599.5)	-75.3%	64,252.2
5.09.03.01	Integrated Disposal Facility	33,952.4	29,670.8	20,975.9	(4,281.6)	-12.6%	8,694.9	29.3%	33,952.4
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>4,789.3</u>	<u>4,553.4</u>	<u>2,672.5</u>	<u>(235.9)</u>	-4.9%	<u>1,880.9</u>	41.3%	<u>4,789.3</u>
	TOTAL TREAT AND DISPOSE WASTE	<u>157,358.1</u>	<u>121,735.6</u>	<u>153,925.6</u>	<u>(35,622.5)</u>	-22.6%	<u>(32,190.0)</u>	-26.4%	<u>157,358.1</u>
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>66,535.3</u>	<u>64,469.5</u>	<u>62,392.2</u>	<u>(2,065.8)</u>	-3.1%	<u>2,077.2</u>	3.2%	<u>66,535.2</u>
RPP TOTAL		<u>1,115,885.9</u>	<u>974,118.8</u>	<u>1,126,774.9</u>	<u>(141,767.1)</u>	-12.7%	<u>(152,656.0)</u>	-15.7%	<u>1,115,885.9</u>

\* BAC on this chart and in succeeding Cumulative Performance tables is for the period FY 2004 - FY 2006.

BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform

## **EXECUTIVE SUMMARY**

### **ON**

## **TANK FARM EARNED VALUE REPORTING**

This Executive Summary reports the cost and schedule performance for the Tank Farm Contractor (TFC), CH2M HILL Hanford Group, Inc. (CH2M HILL) for the month of September 2006.

Spending for the TFC for FY 2006 was \$310.2M, which was well within last month's revised Estimate-at-Completion (EAC) value of \$315.1M and the available contract funding of \$329.8M.

CH2M HILL completed the fiscal year-to-date (FYTD) with a favorable cost variance of \$15.9M. The Cost Performance Index (CPI), which measures the budgeted cost of work performed divided by the actual cost, improved from 0.73 in FY 2005 to a 1.05 in FY 2006. The receipt of year-end passbacks, and efficiencies in Tank Farm Contractor Essential Services, Analytical Technical Services, Tank Farm Support Facilities, the Integrated Disposal Facility (IDF), and Project Support continue to spur this favorable performance; partially offset by unfavorable performance on C-Farm Retrievals, Base Operations, and the DBVS design review completion. The FYTD schedule variance as of September was an unfavorable \$1.9M. The schedule performance index (SPI) improved from a 0.76 in FY 2005 to a 0.99 in FY 2006. The main contributor to this performance continues to be behind schedule activities in C and S-Farm Retrievals, Vadose Zone RCRA Corrective Actions, and Catch Tank Pumping; partially offset by positive performance resulting from the acceleration of transfer system component isolation work scope and favorable progress of preparation work for Tank 241-C-108 retrieval.

## EARNED VALUE PERFORMANCE (\$000)

### 5.07 - BASE OPERATIONS (EXCLUDES 5.07.02)

**Scope Description:** The baseline scope for this work breakdown structure (WBS) includes monitoring and maintaining the DSTs and equipment in compliance with Technical Safety Requirements, and Environmental, Safety, Health and Quality programmatic requirements. This also includes necessary support activities such as project management, engineering, business services, and support to training and procedures. Base Operations also provides site, shared, and miscellaneous services including Service Assessment Pool and Advanced Medical Services. In addition, contract fee for completing PBIs is included.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	126,811.5	126,759.5	122,724.2	(52.0) 0.0%	4,035.2 3.2%	157,263.1
<b>Program -to-date</b>	387,140.4	383,707.1	394,966.0	(3,433.3) -0.9%	(11,288.9) -2.9%	417,592.2

### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily due to the contract fee associated with PBI milestones not being earned as planned.

**Impact:** Earning capability has been adversely impacted.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is due to Site-Wide Shared Services where costs are lower than planned for Advanced Medical Services, expenses related to site layoffs, and work for others. Project support costs are also lower than planned. The favorable variance is partially offset by increased costs for the Environmental Health Program, Waste Feed Operations (WFO) surveillance costs, and the Tank 241-AN-107 Chemistry Optimization activity. The program-to-date

unfavorable cost variance is due to unplanned costs associated with vapor mitigation activities; and greater than planned costs for Readiness-to-Serve, Site Wide Services, certain administrative functions, implementing the new work planning system, and work force restructuring. The unfavorable variance was partially offset by a cost pass-back for benefits in FY 2005.

**Impact:** The unfavorable program-to-date variance is unrecoverable.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## 5.07.02 - ENVIRONMENTAL/TRI-PARTY AGREEMENT MILESTONE ACHIEVEMENT

**Scope Description:** The baseline provides for the safe and compliant storage of the Hanford Site tank wastes until waste is retrieved for processing (currently 53 million gallons of waste in 177 SST and DSTs and approximately 60 miscellaneous underground storage tanks (MUSTS). This includes monitoring and maintaining activities associated with the Hanford Federal Facility Agreement and Consent Order (HFFACO), commonly referred to as the Tri-Party Agreement. Scope includes compliance efforts to meet Tri-Party Agreement Milestones M-23, M-48, and M-46, including characterization, DST Space Management and DST Integrity. Scope includes transfer operations and the operations and maintenance of the 242-A Evaporator to reduce the volume of waste stored in DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	17,448.7	16,933.6	17,352.4	(515.2) -3.0%	(418.8) -2.5%	18,774.2
<b>Program-to-date</b>	75,405.6	66,149.7	57,955.8	(9,255.9) -12.3%	8,193.9 12.4%	76,731.0

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is due to deferral of certain DST Infrastructure and Tank Farm Upgrades activities; delays in DST ultrasonic test (UT) activities caused by vapor mitigation activities and the need to rescan two DSTs; and vendor-experienced software problems.

**Impact:** The program-to-date unfavorable variance will result in some DST Infrastructure and Tank Farm Upgrades activities being delayed.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**



**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is primarily due to DST Integrity Project where the cost of work has been impacted by unplanned repair of encasement drain valves, additional IQRPE support, and low field productivity on AP Valve Pit upgrades, and continued use of supplied air. The unfavorable variance is partially offset by favorable performance on SST/DST Upgrades and 242-A Evaporator. The program-to-date favorable cost variance is due to lower than planned level-of-effort support to DST waste transfers as a result of delays in SST retrievals, and under-runs in certain level-of-effort DST Space Management Project activities.

**Impact:** The fiscal year cost overruns for DST Integrity activities are not recoverable.

**Corrective Action:** None required.

## 5.08 - RETRIEVE AND CLOSE (EXCLUDES 5.08.02, PROJECTS, 5.08.05, RETRIEVALS & CLOSURE)

**Scope Description:** The remaining scope in the baseline for WBS 5.08 is Interim Stabilization, and installation and startup of the AP-101 Waste Transfer Pumping System. Work in this WBS removes pumpable liquids from SSTs to minimize the risk of leakage (referred to as "Interim Stabilization") and meet Consent Decree commitments. The scope also includes consolidation of some of the activities associated with interim isolation of tanks with retrieval and closure of SSTs. In the future, specific life cycle scope in this WBS also includes DST Retrieval and Closure and Closure of Long Term Facilities and Post Closure Monitoring. These activities are all outside of the contract period reporting window.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	0.0	0.0	(15.4)	0.0 0.0%	15.4 0.0%	0.0
<b>Program-to-date</b>	8,925.6	9,039.1	8,395.2	113.5 1.3%	643.9 7.1%	8,925.6

### SCHEDULE VARIANCE

**Description and Cause:** The FYTD and the program-to-date favorable variances are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The FYTD and the program-to-date favorable variances are within the threshold of  $\pm 10\%$  or \$1M. However, a favorable program-to-date variance for Interim Stabilization activities, which were completed under the estimated cost is partially offset by the AP-101 Transfer Pump Replacement, where costs were in excess of baseline estimates due to vapor mitigation activities and the use of significant amount of overtime.

**Impact:** No impact.

**Corrective Action:** None required.



## 5.08.02 - WASTE TREATMENT PLANT (WTP) FEED DELIVERY PROGRAM

**Scope Description:** The baseline provides Waste Feed Delivery management and engineering support. It also provides management of construction projects and startup and testing oversight. Emerging issues necessary to safely manage and perform work have expanded the scope of work performed in this WBS to include vapor mitigation efforts and stack relocation activities.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	6,640.6	6,766.6	6,010.9	126.0 1.9%	755.6 11.2%	7,377.6
<b>Program-to-date</b>	28,085.6	28,226.4	36,762.5	140.8 0.5%	(8,536.1) -30.2%	28,822.6

**SCHEDULE VARIANCE**

**Description and Cause:** The FYTD and the program-to-date variances are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance is due to greater than planned costs for support of vapor mitigation activities.

**Impact:** Increased program-to-date costs are impacting the ability to complete all planned baseline scope.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## 5.08.03.02 - PROJECT W-211 (10 DST RETRIEVAL SYSTEMS)

**Scope Description:** The baseline for this WBS element includes activities required to modify ten DSTs and associated tank farm infrastructure (e.g., pits and buildings) to enable retrieval and delivery of tank wastes to the WTP. Project W-211, Initial Tank Retrieval Systems, will install retrieval systems in 10 DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	1,676.3	1,673.2	1,756.2	(3.0) -0.2%	(83.0) -5.0%	1,676.3
<b>Program-to-date</b>	28,407.3	19,177.9	20,863.6	(9,229.4) -32.5%	(1,682.7) -8.8%	28,407.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is a result of deferring the AY-101, AY-102, and AZ-102 Retrieval Systems to future years and the AN-101 Retrieval System construction and startup activities to later in FY 2006.

**Impact:** There is no adverse impact to the overall project and near-term waste transfers.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance is primarily due to costs related to added scope, the as-built drawings effort, and vapor mitigation activities on the AN-101 Retrieval System.

**Impact:** Necessary work will be completed in accordance with the Project W-211 Ramp-Down Plan to support near-term waste transfers and C-Farm retrieval in FY 2006.

**Corrective Action:** None required.

### 5.08.04.01 - PROJECT W-314 (TANK FARM RESTORATION AND SAFE OPERATIONS)

**Scope Description:** The baseline for Project W-314 provides essential tank farm infrastructure upgrades to support waste feed delivery to the WTP and to correct environmental compliance deficiencies with the tank farm support systems. Work scope includes waste transfer line installation, valve pit upgrades, ventilation system upgrades, instrument/control system upgrades, electrical distribution system upgrades and installation of a Master Pump Shutdown system. The project scope includes Phase 1 and 2 upgrades in seven different tank farms (AN, AW, AY, AZ, AP, SY, and A), as well as transfer system upgrades between tank farms.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	2,865.8	2,863.2	2,903.7	(2.5) -0.1%	(40.4) -1.4%	2,865.8
<b>Program-to-date</b>	37,633.4	34,466.2	41,466.9	(3,167.2) -8.4%	(7,000.7) -20.3%	37,633.4

#### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily due to delays in field construction and start-up/turnover activities as a result of changes to operational priorities and funding reductions, as-found field conditions, and vapor mitigation.

**Impact:** None.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

#### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily

caused by vapor mitigation activities and as-found field conditions, which resulted in additional effort in field construction, and extended project management and engineering support.

**Impact:** The program-to-date cost variance is not recoverable.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The remainder of the project work has been replanned to the out years in the BCR.

## 5.08.04.02 - PROJECT E-525 (UPGRADE TRANSFER SYSTEMS)

**Scope Description:** The baseline for Project E-525 provides activities required to define, design, procure, construct, test, turnover, and manage modifications to a portion of the DST Transfer System. The scope of Project E-525 is further defined within the following five design/construction packages: 1) AZ-151 Catch Tank Replacement, 2) Clean-Out Box (COB) Modifications, 3) SY-Farm Transfer Lines, 4) 204-AR Load-Out Facility Transfer Line, and 5) PFP Transfer Lines. These modifications brought a portion of the DST transfer system into compliance with WAC 173-303-640, in support of Tri-Party Agreement Milestone M-43-00.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	2,712.4	2,647.4	3,100.4	(65.0) -2.4%	(453.0) -17.1%	2,712.4
<b>Program-to-date</b>	17,307.8	14,100.2	26,827.3	(3,207.6) -18.5%	(12,727.1) -90.3%	17,307.8

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily due to deferral of remaining field construction for the AZ-151 Catch Tank Bypass, SY-Farm Transfer Line Upgrades, and remaining AW-Farm COBs, because of operational priorities and funding reductions.

**Impact:** None.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to performing COBs and SY-Farm Transfer Line Backfill work on supplied air (not budgeted) partially offset by underruns on the AZ-151 Catch Tank Bypass Construction

and efficiencies in Project Support. The program-to-date unfavorable cost variance is primarily in Field Construction and is due to unplanned costs attributable to unexpected as-found field conditions, enhanced work package development/approval, and vapor mitigation activities.

**Impact:** The program-to-date cost overruns are not recoverable.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.



## 5.08.05 - RETRIEVAL / CLOSURE PROGRAM

**Scope Description:** The baseline provides for Retrieval and Closure support activities in this WBS. Specifically, the scope includes program management, regulatory documentation, SST cross-site transfers, technology development, cold test facility management and maintenance, Vadose Zone support, inactive waste sites administration, Tank Farm Support Facilities/Transfer Systems. The scope also includes the Closure Project Technical Safety Requirement/Basic Maintenance on SSTs, Closure Project Operations Essential Services, Closure Project Field Projects/Upgrades, and the solid waste management programs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	45,966.9	47,127.8	40,321.4	1,160.8 2.5%	6,806.4 14.4%	50,620.2
<b>Program-to-date</b>	136,195.6	126,944.5	140,255.0	(9,251.1) -6.8%	(13,310.5) -10.5%	140,848.9

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD favorable variance that is due to acceleration of DST Component Isolation work that was planned for FY 2007 and completing it in FY 2006; partially offset by Vadose Zone RCRA Corrective Actions caused by the failure of the in-tank supplemental light, increased sampling requirements, failure/replacement of the C-103 pump and sluicer, the AN-106 electrical outage, and resources availability issues. The program-to-date unfavorable schedule variance is primarily due to field work delays on Vadose Zone RCRA Corrective Actions activities due to resource availability issues, vapor mitigation activities, and weather delays; delays on starting Tank Farm Risk Assessments modeling and waste constituent studies; delays in Liquid Level and Video Assessment, and HIHTL Disposal activities due to vapor mitigation activities, radiological conditions, and weather delays.

**Impact:** It is anticipated that the Tri-Party Agreement milestones related to Vadose Zone RCRA Corrective Actions documentation will be integrated into a renegotiated milestone.

**Corrective Action:** A recovery plan for Vadose Zone RCRA Corrective Actions has been implemented and incorporated into the baseline.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD favorable cost variance because of: 1) lagging progress and/or costs associated with various level-of-effort Waste Management Support (Department of Transportation Type A containers) and SST Operations Essential Services (Breathing Air Facility) activities; 2) efficiencies in performing the DST Component Isolation accelerated work scope; 3) the HRR LDM activity realized some contract efficiencies; and 4) costs are less than expected for 244-CR Vault and HIHTL Disposal activities. The program-to-date unfavorable cost variance is due to unplanned Closure Project surveillance and monitoring costs for vapor mitigation activities and the use of increased overtime.

**Impact:** The FYTD favorable cost variance will diminish as costs are received and work is performed.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## 5.08.06/07 - SST RETRIEVAL EAST / WEST AREA

**Scope Description:** The baseline for this element includes activities required for the retrieval of all 149 SSTs. The scope includes project management, design and engineering, retrieval procurement, retrieval system installation, and retrieval startup and readiness. Scope in this WBS also includes the operations of the SST retrieval systems.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	19,196.8	18,250.9	21,188.6	(945.9) -4.9%	(2,937.7) -16.1%	20,707.8
<b>Program-to-date</b>	112,821.0	57,068.0	136,653.5	(55,753.0) -49.4%	(79,585.5) -139.5%	114,332.0

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to failure of the Tank 241-C-204 AMS on August 17, 2006, deployment of field resources to other tank farm priorities which delayed the reconfiguration to Tank 241-C-201, and retrieval of additional waste from Tank 241-C-201 during March. The program-to-date unfavorable schedule variance is due to delays in C-Farm Modified Sluicing and Mobile Retrieval Systems design; C-Farm retrievals due to vapor mitigation activities and as-found conditions such as the potential for gelling and high radiation; development of multiple retrieval systems and the need for multiple evolutions due to tank waste characteristics; and deferral of B, T, and U-Farm retrievals.

**Impact:** Waste retrieval from Tank 241-C-204 began July 23, 2006. However, failure of the Tank 241-C-204 AMS will delay completion of retrieval until December 2006. The program-to-date issues identified have caused an extension in the schedules for retrieval procurement, construction, and operations.

**Corrective Action:** Retrieval operations are progressing following installation of a new rotation mechanism for the Tank 241-C-204 AMS. The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the baseline will provide management with a meaningful tool to assess baseline performance.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to unplanned Tank 241-C-103 retrieval costs for replacement of the failed sluicer and six in-tank cameras, the associated radiological decontamination issues, and other issues which required overtime to resolve. The program-to-date unfavorable cost variance for SST retrievals is due to a realization of risks in the field for which no contingency was planned, including higher than planned material and fabrication costs, longer than planned retrieval durations, increased special equipment and engineering costs, rework due to improvements to the work planning process, weather delays resulting in work stoppages, costs due to vapor mitigation activities, costs for a second pumping system for Tank 241-S-102, and costs for the partial retrieval of Tank 241-S-109 test waste in support of the DBVS.

**Impact:** Unplanned program-to-date costs are impacting ability to complete all approved baseline scope.

## 5.08.12/.13 - SST CLOSURE

**Scope Description:** The baseline provides the scope for tank farm closure which includes those activities required for interim closure of each tank in the farm, followed by closure of the entire farm once all tanks within the farm are interim closed. Scope for interim closure of each tank includes characterization, engineering evaluation and reporting, deactivation and isolation of transfer lines, pits and penetrations to the tank, and placement of a grout layer in the bottom of the tank to stabilize the residual waste.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	423.7	419.1	304.5	(4.6) -1.1%	114.6 27.4%	458.8
<b>Program-to-date</b>	17,087.7	7,222.2	10,582.1	(9,865.5) -57.7%	(3,359.9) -46.5%	17,122.9

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is primarily due to the delays in the approval of the Tank Closure and Waste Management (TC&WM) Environment Impact Statement (EIS) Record of Decision (ROD).

**Impact:** Closure of SSTs is dependent on the issuance of the TC&WM EIS ROD.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a negligible FYTD favorable variance attributable to Tanks 241-C-106 and 241-S-112 Interim Closure. The program-to-date unfavorable cost variance is due to higher than planned costs for sampling and analytical work, and closure design and work package planning.

**Impact:** Increased costs are impacting ability to complete all planned baseline scope.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.



## 5.09 - TREAT &amp; DISPOSE WASTE (EXCLUDES WBS 5.9.2.2/2.3/2.5/3.1/3.4)

**Scope Description:** The baseline provides for the remaining scope for WBS 5.09, which includes the Infrastructure Services that provide for electrical power to the WTP, Strategic planning including the support to Optimization Studies, Project W-QQQ support, and support to the Tri-Party Agreement Milestone M-62-08 deliverables. Also included are the Failed Melter Disposal System and future expansions to IDF. Both are outside of the contract-to-date reporting. Startup and Turnover, performance of Operations Readiness Reviews, and turnover of the constructed IDF to Operations are included in this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	3,631.7	3,564.0	3,162.4	(67.8) -1.9%	401.5 11.3%	3,998.1
<b>Program-to-date</b>	27,583.7	24,979.2	19,936.3	(2,604.5) -9.4%	5,042.9 20.2%	26,020.7

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is because of delay in Project W-QQQ (Hanford Shipping Facility) in order to fund higher priority work.

**Impact:** No impact.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects FYTD and program-to-date favorable variances which are due to efficiencies in WTP interface, ILAW Performance Assessment, and Strategic Planning activities.

**Impact:** No impact.

**Corrective Action:** None required.

## 5.09.02.02 - TRU / LLW PACKAGING

**Scope Description:** The baseline provides for the design, construction, testing, operation, and decommissioning of a system to treat contact handled transuranic/mixed (CH-TRUM) waste for eventual shipment/disposal at the Waste Isolation Pilot Plant.

1) CH-TRUM Waste Packaging: Nine tanks are currently thought to contain CH-TRUM waste: four T-200 series SSTs, four B-200 series SSTs, and Tank 241-T-111. 2)

Remote Handled transuranic/mixed (RH-TRUM) Waste Packaging: Three tanks are currently thought to contain RH-TRUM waste: 241-AW-103, 241-AW-105 and 241-SY-102. 3)

Low-Level Waste (LLW) Packaging: activities required to operate a system to package LLW such that the packages can be sent to a licensed facility for disposal. One tank, 241-T-110, is currently thought to contain LLW. The volume of LLW in this tank is approximately 400,000 gallons.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	0.0	0.0	103.0	0.0 0.0%	(103.0) 0.0%	0.0
<b>Program-to-date</b>	28,343.4	11,695.5	19,911.5	(16,647.9) -58.7%	(8,216.0) -70.2%	28,343.4

**SCHEDULE VARIANCE**

**Description and Cause:** The program-to-date unfavorable schedule variance result primarily from permitting related delays in converting a Research, Development, and Demonstration permit into an extensive Part B permit; National Environmental Policy Act of 1969 (NEPA) permitting and Part B certification issuance delays; and delays due to the ORP's decision to issue the Preliminary Documented Safety Analysis (PDSA) as new scope, in addition to the planned Documented Safety Analysis amendment. Consequently, the ORP directed a ramp-down of the Transuranic Waste (TRU) project to place the project in indeterminate standby until resolution of NEPA and other permitting issues.

**Impact:** Permitting issues and regulatory uncertainty have delayed packaging operation planning such that completion of the first 284,000 gallons of tank waste by the end of FY 2006 is no longer practical.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the

increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance result from unplanned costs for rework associated with NEPA document revision per the ORP, new scope to issue the PDSA, and the packaging vendor's inadequate design estimation.

**Impact:** A revised estimate at completion for the project has been developed and will be reflected in the life cycle baseline.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## 5.09.02.03/.05 - LAW TREATMENT

**Scope Description:** The baseline provides for bulk vitrification activities which include 1) Issue Request for Proposal for containerized grout and bulk vitrification predownselect; 2) Award contract to vendor for testing and engineering preconceptual design development; 3) Contract costs and support for vendor testing and design; 4) Issue predownselect data package and support the decision process; 5) Prepare conceptual design for Hanford-deployable Steam Reforming unit [Phase 0]; 6) Award vendor contracts for testing and engineering preconceptual design development; 7) Process Pretreatment; 8) Perform long-lead permitting activities, issue procurement package, and award contract for low-activity waste (LAW) system construction; 9) Contract costs and support for vendor design, fabrication, and testing, issue design and implement field modifications for tank farm LAW system deployment; and 10) Operate LAW system.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	25,894.7	25,663.1	27,697.8	(231.7) -0.9%	(2,034.8) -7.9%	27,357.7
<b>Program-to-date</b>	61,230.0	48,976.4	87,893.6	(12,253.6) -20.0%	(38,917.2) -79.5%	64,252.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is due to delays caused by technical issues associated with the failed melt container, additional environmental standard for the off-gas system, and delay in placement of procurements to determine if the specifications could be modified to reduce costs.

**Impact:** The project design is complete. Late design completion will not impact the critical decision process, fabrication, or construction that are not scheduled until FY 2007 or later.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project

work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to additional engineering manpower required to issue, review, revise, and complete the DBVS design two months later than planned. The program-to-date unfavorable cost variance is a realization of risks for which no contingency was planned, including higher than anticipated negotiated contract costs with AMEC Earth and Environmental (the primary DBVS subcontractor) for design, fabrication, and installation; and new project scope (Engineering Scale-13).

**Impact:** The FYTD is not recoverable. The program-to-date cost variances for supplemental treatment will be addressed with the approval and implementation of the life cycle performance baseline.

**Corrective Action:** This activity will overrun the baseline budget, but additional funding has been allocated.

## 5.09.03.01 - INTEGRATED DISPOSAL FACILITY (IDF)

**Scope Description:** The baseline provides for planning, designing, and constructing the onsite expandable IDF for disposing of compliant ILAW stream packages produced at the WTP and through supplemental treatment, and the U.S. Department of Energy, Richland Operations Office (DOE-RL) generated mixed low-level waste (MLLW) and LLW. The IDF will consist of the initial capacity near-surface, remote-handled waste trench facility to support WTP Operations ILAW Production and the DOE-RL MLLW and LLW disposal quantities. Infrastructure necessary to provide operations and maintenance support (e.g., utilities, roads, and fencing) will be provided by this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	7,147.6	6,973.9	5,669.1	(173.8) -2.4%	1,304.7 18.7%	7,174.3
<b>Program-to-date</b>	33,566.5	29,334.2	20,786.0	(4,232.3) -12.6%	8,548.2 29.1%	33,952.4

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is due to delay in issuance of Part B Permit for the IDF, which resulted in suspension of construction activities. The permit was contingent upon adequate NEPA coverage, which the Solid Waste EIS failed to provide.

**Impact:** Completion of the project is expected ahead of the Tri-Party Agreement milestone commitment date.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a favorable FYTD variance due to effective management of construction changes, utilization of internal engineering resources rather than subcontracted support, and less project management resource usage than planned. The project realized a favorable variance at construction completion, but a portion will be required to fund. Care and Custody of the facility through FY 2006. The program-to-date favorable variance is due to the favorable fixed-price contract for the IDF.



## 5.09.03.04 - PROJECT W-464 (INITIAL IHLW STORAGE FACILITY)

**Scope Description:** The baseline provides for Project W-464, Interim Storage Facility which is a Canister Storage Building Retrofit Subproject that addresses initial operations storage. This element provides onsite interim storage for Initial Operations IHLW canisters until they can be shipped to an offsite geological repository. The planning for receipt and interim storage of the IHLW canisters shall comply with the Waste Acceptance System Requirements Document and the Office of Civilian Radioactive Waste Management Waste Acceptance Preliminary Specifications. This WBS covers equipment for transportation of IHLW canisters from the WTP to the interim storage facilities. The work scope activities included under this WBS element are as follows: Provide Project Management (Capital) and project engineering required for execution of design, procurement and construction of the Interim Storage Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	98.9	98.9	30.2	0.0 0.0%	68.7 69.5%	109.4
<b>Program-to-date</b>	4,768.0	4,532.1	2,663.6	(235.9) -4.9%	1,868.5 41.2%	4,789.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects FYTD and program-to-date variances that are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a negligible FYTD favorable variance that is due to effective project management and utilizing less project management support resources than planned. The program-to-date favorable cost variance is due to efficiencies realized on the detailed design activity, resulting from favorable contract performance.

**Impact:** No impact.

**Corrective Action:** None required.

## 5.10 - ANALYTICAL TECHNICAL SERVICES

**Scope Description:** The baseline scope includes ATS management and Hanford Services support in order to meet the capability/capacity requirements on the 222-S Laboratory complex for the Hanford mission. Also included are: 222-S Laboratory spares; 222-S Laboratory spare reserves; capital equipment not related to construction; technology development activities; perform facility assessment and characterization activities; develop NEPA and other regulatory documentation, deactivation plans, post-deactivation surveillance and maintenance plans; develop deactivation endpoints and turnover package; flush, isolate, and blank process or sub-process systems; and remove radioactive and hazardous materials and mixed wastes.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	19,976.8	20,351.8	17,121.0	375.0 1.9%	3,230.8 15.9%	22,301.9
<b>Program-to-date</b>	63,817.2	62,466.5	60,059.1	(1,350.7) -2.1%	2,407.3 3.9%	66,142.2

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is because of delayed 222-S Laboratory upgrades due to change in operational priorities.

**Impact:** Continued degradation of facilities/equipment will occur until upgrades are completed.

**Corrective Action:** Behind schedule laboratory upgrades will be performed in FY 2006, or later, subject to funding availability and operational necessity.

**COST VARIANCE**

**Description and Cause:** The baseline reflects FYTD and program-to-date favorable variances due to 1) less than planned dedicated and matrixed staff in support of corrective maintenance, Facility Operations, and Integration Support; 2) planning labor rates were greater than actual costs; 3) redeployment of Analytical Process Development (ADP) staff to support vapor analysis and other analytical methods development scope; and 4) planned shipments of waste for processing have been less

than planned due to actual analytical production. Additionally, program-to-date unplanned costs have been incurred relative to the transition of the 222-S Laboratory analysis activities to Advanced Technology Laboratories (ATL). Specific costs include ATL transition costs, Information Resource Management Desktop support, and Waste Management of laboratory samples. These costs have been offset by favorable variances elsewhere in the ATS program.

**Impact:** No impact.

**Corrective Action:** Under runs are being used to fund other high priority ATS work scope. The rest of the baseline variance will self-correct over time. The impact of unplanned costs relative to the transition of 222-S Laboratory analysis to ATL has been documented and will be reflected in the life cycle baseline update.

**Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms****SST Retrieval and Closure Program****I. Deliverables**

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**

Due: 9/30/24

Status: At risk

- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**

Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)

Status: Missed. Current working schedule projects completion of some C-Farm retrievals extending beyond September 2006.

- Completion of four limits of technology retrieval demonstrations:
  - Saltcake dissolution (S-112): Completed (M-45-03C)
  - Modified sluicing (C-106): Completed
  - Vacuum retrieval (C-200s): In progress; C-203 field retrieval operations completed on 3/24/05; C-202 retrieval completed on 8/11/05; C-201 retrieval completed on 3/23/06; forecast completion of C-204 in FY 07.
  - Mobile retrieval (C-101, C-105, C-110, or C-111): C-101 start of retrieval is currently projected for fiscal year 2011.
- Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
  - Tank S-102: High Resolution Resistivity (HRR) system installed; supporting retrieval operations. Started HRR injection test in January 2006 and completed test in May 2006. RPP-30121, Revision 0A, Tank 241-S-102 High-Resolution Resistivity Leak Detection and Monitoring Testing Report, was transmitted to Ecology on September 28<sup>th</sup>, 2006. The letter transmitting RPP-30121 also included recommendations for future use.
  - Tank C-103: HRR system operating in support of retrieval operations
  - Tank C-108: HRR system to be installed by December 2006 to support start of retrieval.
- Submittal of TWRWPs:
  - Tanks C-201, C-202, C-203, and C-204: Completed on 4/8/04
  - Two (2) 100-series tanks by 7/31/04: Completed on 7/29/04 (C-103 and C-109)
  - Four (4) 100-series tanks by 10/31/04: Completed on 10/8/04 (C-102, C-104, C-107, C-108, and C-112).

- Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111).
- Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
  - WMA C: Completed; submitted from ORP to Ecology on 6/22/05
  - WMA T: Completed; submitted from ORP to Ecology on 6/22/05.
- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period February 2007 through August 2008)**  
Due: 9/30/06  
Status: Missed
- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the Period September 2008 to September 2013)**  
Due: 1/31/08  
Status: On schedule
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**  
Due: 10/31/12  
Status: On schedule
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**  
Due: 9/30/18  
Status: At risk
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/07  
Status: At risk
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/08  
Status: At risk
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**  
Due: 9/30/09  
Status: At risk
- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**  
Due: 9/30/10  
Status: At risk

- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**  
Due: 9/30/11  
Status: At risk
- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**  
Due: 9/30/12  
Status: At risk
- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**  
Due: 9/30/13  
Status: At risk
- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**  
Due: 9/30/14  
Status: At risk
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/15  
Status: At risk
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/16  
Status: At risk
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/17  
Status: At risk
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**  
Due: 9/30/24  
Status: On schedule
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**  
Due: 3/31/12 (See M-45-06)  
Status: On schedule
- **M-45-06-T04, Complete Closure Actions on one WMA**  
Due: 3/31/14 (See M-45-06)  
Status: At risk

**II. Significant Accomplishments**

- Completed C-103 solid sampling.
- Initiated C-103 RDR preparations.
- Continued C-204 retrieval.
- Submitted C-201 RDR to Ecology.
- Continued C-108 construction activities (sluicer installation, preparation for slurry pump installation, raw water skids) and completed removal of legacy saltwell pump and screen from Riser 13.
- Issued RPP-30121, Revision 0A, Tank 241-S-102 High-Resolution Resistivity Leak Detection and Monitoring Testing Report, transmitted to Ecology on September 28<sup>th</sup>, 2006 with recommendations for further deployment.

**III. Significant Planned Activities in the Next Six Months**

- Complete negotiation on M-45-00B and M45-00C milestones.
- Work with Ecology, EPA, and DOE-RL to develop Retrieval Team recommendation on retrieval and closure activities.
- Completed C-204 waste retrieval, vacuum retrieval technology demonstrations at remaining C-200 tanks.
- Complete C-103 retrieval evaluation.
- Complete construction of C-108 retrieval system and start retrieval.
- Complete design for C-109 retrieval system, and initiate construction activities.
- Obtain Ecology approval of Mobile Retrieval System TWRWP.
- Continue development of C-200 demonstration project.

**IV. Issues**

- M-45-00B commitment to retrieve all C-Farm tanks by September 2006 is unrecoverable. ORP, Ecology, and EPA have initiated the Tank Retrieval and Storage Team to explore SST retrieval assumptions and alternatives and to develop a proposed path forward for senior management consideration. Team goal is to present a proposal for SST retrieval activities between now and startup of the Waste Treatment Plant by October 2006, to support negotiation on M-45 retrieval milestones.



**C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS**

<b>Tank</b>	<b>Final Design Drawings complete</b>	<b>Construction Complete</b>	<b>Process Control Plan Complete</b>	<b>Start Retrieval</b>	<b>Complete Retrieval</b>	<b>TSAP Complete</b>	<b>Retrieval Data Report or Appendix H to Ecology/EPA</b>
C-101	7/2/09	8/5/10	9/4/10	10/4/10	1/9/12	2/9/12	9/28/12
C-102	1/14/11	10/13/11	12/10/12	1/10/12	11/21/12	12/12/12	11/19/13
C-103	Complete	Complete	Complete	Complete	9/25/06	Complete	4/26/07
C-104	12/7/11	9/7/12	10/26/12	11/26/12	8/30/13	11/26/12	1/7/15
C-105	5/2/12	6/5/13	8/3/13	9/3/13	3/7/14	9/3/13	12/5/14
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	3/21/14	12/19/14	2/27/15	3/27/15	12/21/15	3/27/15	4/27/17
C-108	Complete	11/30/06	1/28/07	2/28/07	9/30/07	2/28/07	4/28/08
C-109	4/2/07	3/12/08	3/24/08	4/24/08	11/7/08	4/24/08	11/5/09
C-110	10/29/12	12/3/13	2/10/14	3/10/14	10/9/14	3/10/14	5/27/15
C-111	8/18/14	9/21/15	11/22/15	12/22/15	4/29/16	12/22/15	2/1/17
C-112	10/18/13	7/23/14	9/10/14	10/10/14	3/26/15	10/10/14	3/2/17
C-201	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-202	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-203	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-204	Complete	Complete	Complete	Complete	12/ 31/06	Complete	7/31/07

NOTE: Completion dates are based on the Interim Baseline as of 10/31/06 and are subject to change as efforts continue to identify and implement schedule efficiencies.

## SST RETRIEVAL SEQUENCE DOCUMENT

### I. Deliverables

- **M-45-02M, Submit Biennial Updates to SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition**  
Due: 3/1/06 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: Complete. RPP-21216 Rev. 1B, Single-Shell Tank Retrieval Sequence Document and Double-Shell Tank Evaluation Document, delivered to Ecology on March 13, 2006.
- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule
- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule

### II. Significant Accomplishments

- None

### III. Significant Planned Activities in the Next Six Months

- Revise and resubmit Retrieval Sequence Document, as necessary.

### IV. Issues

- Ecology provided ORP a notice of deficiency (NOD) on the document submitted to meet the M-45-02M milestone (Ecology letter dated May 25, 2006). ORP response (letter dated June 2, 2006) did not concur with all stated deficiencies but committed to work with Ecology to resolve issues, provide requested information, and submit an updated document by August 31, 2006, if necessary. ORP update letter (ORP letter dated August 31, 2006 requested extension for submittal of update to 30 days after HFFACO Executive Committee agrees to Retrieval Team recommendation.

## **TANK RETRIEVALS WITH INDIVIDUAL MILESTONES**

### **Tank 241-C-106**

#### **I. Deliverables**

- **M-45-05H, Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project**  
Due: 6/30/04  
Status: Completed
- **M-45-05L-T01, Complete Full-Scale C-106 Waste Retrieval**  
Due: 11/1/03  
Status: Completed
- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**  
Due: 2/27/04  
Status: Completed

#### **II. Significant Accomplishments**

- None

#### **III. Significant Planned Activities in the Next Six Months**

- Complete revisions to C-106 Appendix H documentation, incorporating Ecology and NRC comments and reflecting the Single-Shell Tank Performance Assessment (SST PA).
- Submit C-106 revisions to NRC to complete their review of the C-106 exception request.
- Work with Ecology and EPA to obtain approval of C-106 Appendix H exception request.
- Work with Ecology and EPA to develop tank leak loss volume evaluation process.
- Coordinate Ecology and EPA review of the SST PA.

#### **IV. Issues**

- C-106 Closure Plan approval and SST Categorical Notice of Construction Phase 3 (closure) are pending completion of the Tank Closure and Waste Management Environmental Impact Statement and associated Record of Decision (ROD); forecast completion for the final EIS is June 2008.

### **Tank 241-S-102**

#### **I. Deliverables**

- **M-45-05C, Complete S-102 Initial Waste Retrieval Project Construction (to Include all Physical Systems Including Those Necessary for Leak Detection, Monitoring, and Mitigation)**  
Due: 3/31/04  
Status: Completed
- **M-45-06C, Submit a Certified S-102 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**  
Due: 9/30/04  
Status: Completed
- **M-45-05A, Complete Waste Retrieval from Tank S-102**  
Due: 3/31/07  
Status: At risk.
- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**  
Due: 12/31/07  
Status: At risk.

#### **II. Significant Accomplishments**

- Reconnected the Seepex pump and retrieved approximately 14,000 gallons of waste to the SY-102 double shell tank.
- Installed and began testing of the first high pressure mixer (i.e., rotary viper) at the Hanford Cold Test Facility.
- Initiated construction activities to support the installation of the rotary viper in S-102.
- Initiated the testing of the NESL FoldTrack mobile retrieval tool.

#### **III. Significant Planned Activities in the Next Six Months**

- Continue development and testing of new retrieval technologies
- Resume retrieval operations
- Install high-pressure mixers (i.e., Rotary Vipers)
- Resume retrieval operations
- Retrieve until SY-102 is at full capacity
- Perform a cross-site transfer and resume operations

#### **IV. Issues**

- Ecology letter (dated August 3, 2006) requested ORP provide recovery

plan for Milestone M-45-05A by August 31, 2006. ORP response (letter dated August 29, 2006) committed to provide recovery plan by November 1, 2006, to allow for completion of ongoing technology evaluation.

### **Tank 241-S-112**

#### **I. Deliverables**

- **M-45-06B, Submit a Certified S-112 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**

Due: 9/30/04

Status: Completed.

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**

Due: 6/30/05

Status: Completed.

- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**

Due: 12/31/07

Status: On schedule.

#### **II. Significant Accomplishments**

- Retrieval activities were secured when the retrieval efficiency dropped below un-sustainable levels.
- Performed in-tank video to support volume estimation.

#### **III. Significant Planned Activities in the Next Six Months**

- Perform residual volume calculation and evaluate path forward.

#### **IV. Issues**

- Additional retrieval may be necessary after the RWL demonstration to meet TPA-M-45-00 volume requirements of  $\leq 360$  cubic feet.

**Milestone M-45,-50,-60 Single-Shell Tank Corrective Action****I. Near-Term Deliverables:**

- **M-45-55-T03, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA T, TX, and TY.**

Due: 07/30/05

Status: Complete, Delivered on 07/29/05. Ecology comments were received on 01/05/06. Responses have been provided to Ecology.

- **M-45-55-T04, Submit to Ecology for review and comment a draft of the A-AX, C, and U Field Investigation Report.**

Due: 04/30/06

Status: Missed. Negotiations are ongoing regarding scope and schedule for this report. A draft TPA change request, letter 06-TPD-026, was provided to Ecology on May 4, 2006. Ecology, ORP and CH2M HILL met November 1, 2006 to discuss change package approach.

- **M-45-55, Submit to Ecology for review and approval as an Agreement primary document a Phase 1 RFI report integrating results of data gathering activities and evaluations for WMAs S-SX, T, TX-TY, A-AX, B-BX-BY, C, and U; and related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations.**

Due: 01/31/07

Status: At Risk: C farm direct push characterization near the C-152 pipeline leak was completed June 9, 2006. 15 samples were pulled and sent for analysis. Push sampling equipment is being moved into BX farm. SGE activities will begin on 8/21/06 in U Farm and 8/24/06 in C Farm.

A draft TPA change request, letter 06-TPD-026, was provided to Ecology on May 4, 2006. Ecology, ORP and CH2M HILL met November 1, 2006 to discuss change package approach.

- **M-45-56, Complete Implementation of Agreed to Interim Measures.**

Due: TBD

Status: Completed. ORP and Ecology met on 09/05/06.

- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a RCRA Corrective Actions Corrective Measures Study for WMAs S-SX, T-TX-TY, B-BX-BY, A-AX, C, and U.**

Due: 06/30/07

Status: At Risk. A draft TPA change request, letter 06-TPD-026, was provided to Ecology on May 4, 2006. Ecology, ORP and CH2M HILL met November 1, 2006 to discuss change package approach.

- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's RCRA Corrective Actions Work Plan for SST WMAs.**

Due: 09/30/07

Status: At Risk. A draft TPA change request, letter 06-TPD-026, was provided to Ecology on May 4, 2006. Ecology, ORP and CH2M HILL met November 1, 2006 to discuss change package approach.

## **II. Significant Accomplishments:**

- Hydraulic hammer direct push system is being successfully deployed around tank 241-T-101, geophysical logs are being run and samples collected.
- A draft report, Surface Geophysical Exploration of the S Tank Farm at the Hanford Site, RPP-RPT-30976, was received for review on 10/31/06.
- Surface Geophysical Exploration of B, BX, and BY tank farms as well as surrounding liquid disposal sites was initiated on 10/23/06. This represents the first fully integrated deployment of the technology between the Tank Farm waste management area and the adjacent central plateau waste sites.

## **III. Significant Planned Actions in the Next Six Months:**

- Initiate design/construction activities for interim surface barriers at ER-311 and T-106.
- Initiate SGE work in B/BX/BY WMA
- Develop initial U FIR sections for internal review
- Develop initial sections of role-up RFI for internal review
- Complete direct push characterization work in T farm and initiate direct push work in B farm.
- Complete analysis of SGE data collected in the 241- C farm.

## **IV. Issues**

- A draft change package for M045-55-T-04, 55, 58, and 60 has been submitted to Ecology. Ecology, ORP and CH2M HILL met November 1, 2006 to discuss change package approach.



**Milestone M-47-00, Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage, and Disposal Facilities**

**I. Near-Term Deliverables:**

- **M-47-02, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first high-level waste feed to the Pretreatment/Treatment Complex.**  
Due: 03/31/09  
Status: Complete. ORP completion letter submitted to WDOE June 28, 2006, (06-TPD-043). Ecology formally advised ORP on 08/24/06 that this Fall, they will conduct an inspection of records to verify completion of the milestones.
- **M-47-04, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first low-activity waste feed to the pretreatment/treatment complex. Installation of the pump will not be required until necessary to support WTP waste feed activities.**  
Due: 03/31/09  
Status: Complete. ORP completion letter submitted to WDOE June 28, 2006 (06-TPD-043). Ecology formally advised ORP on 08/24/06 that this Fall, they will conduct an inspection of records to verify completion of the milestones.
- **M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank.**  
Due: 03/31/09  
Status: Pending path forward with WDOE for renegotiation of new milestone commitments.
- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018.**  
Due: 06/30/10  
Status: Negotiations are not yet underway.

**II. Significant Accomplishments:**

- The 242-A Hot Evaporator Campaign 06-01 was conducted 8-31-06 through 9-10-06. The estimated feed volume for this campaign was approximately 600,000 gallons from DST AP-107 processed through AW-102. The resulting slurry was transferred to two DSTs; the slurry with limited solids was transferred to AP-103 (1.35 SpG) and the more

concentrated slurry (1.42 SpG) was transferred to AP-108 with as much as 63 inches of solids added.

### III. Significant Planned Actions in the Next Six Months:

- None.

### IV. Near-term Actions Needed by DOE or Ecology:

- Ecology concurrence that TPA Milestones M-47-02 and M-47-04 are complete (06-TPD-043). Ecology plans to conduct a review during the Fall of CY 2006 to verify completion of milestones.

### V. Issues:

- Nothing to report.

### EVAPORATOR CAMPAIGNS

Source Tank/Slurry Tank (Staging Transfers to AW-102 are implicit)

FY 06	FY 07	FY 08	FY 09
Cold Run (completed in April)			
AW-102 to AP-3/8 (completed in September)	AW-102 to AP-3/-8	AP-107 to AP-7	AP-105 to AP- 5/-7
	AY-102 to AP-3/-8		AP-104 to AP-5

**Milestone M-48-00, DST Integrity Assessment Program****I. Deliverables:**

- **M-48-14, Submit Written Integrity Report for the DST System**  
Due: 3/31/06  
Status: Complete.
- **M-48-15, Submit a Report to Ecology for the Re-examination of Six DSTs by Ultrasonic Testing**  
Due: 9/30/07  
Status: On schedule.
- **M-48-00, Complete Tank Integrity Assessment Activities for Hanford Double Shell Tanks System**  
Due: 9/30/07  
Status: On schedule.
- **M-48-07, Submit To Ecology a Disposition Plan for All DST Components Not In Use Post 2005.**  
Due: 12/16/2000  
Status: Complete.
- **M-48-07b, (Embedded milestone) Isolation, Stabilization and Monitoring (i.e., administrative and/or engineering controls in place to prevent use within twelve (12) months, or sooner, from the date of removal from service.**  
Due: 06/30/2006  
Status: Complete. ORP letter 06-TPD-042 transmitted to Ecology on June 27, 2006.
- **M-48-07A, Complete Construction of the AZ-301 Condensate Return System and Pit Upgrades. This includes construction of the AZ-301 condensate return, removal of AZ-151 catch tank from service, construction of the AP-106A central pump pit upgrades, and construction of the SY-B valve pit upgrade (milestones M-48-07A-A, M-48-07A-B & M-48-07A-C).**  
Due: 06/30/06  
Status: Complete. ORP letter 06-TPD-041 transmitted to Ecology on June 28, 2006.
- **M-48-07A-A, Complete Construction of the AZ-301 Condensate Return System and Pit Upgrades Remove the AZ-151 Catch Tank System from Service.**  
Due: 10/31/05 for AZ-301 Condensate Return system and removal of  
Status: Complete
- **M-48-07A-B, Complete construction of the AZ-301 condensate return system and pit upgrades. This includes:**

Due: 3/31/06 AP-106A Central Pump Pit Upgrade (Evaluate integrity of pit and replace pit coating if necessary).

Status: Complete.

- **M-48-07A-C, Complete construction of the AZ-301 condensate return system and pit upgrades. This includes:**

Due: 6/30/06 for complete construction for the 241-SY-B Valve Pit Upgrade (Evaluate integrity of pit and replace pit coating if necessary).

Status: Complete. ORP letter 06-TPD-041 transmitted to Ecology on June 28, 2006.

## **II. Significant Accomplishments:**

- Completed the AY-102 annulus video
- Completed pressure testing of SL-166 and SN-266 (AN-06A)

## **III. Significant Planned Actions in the Next Six Months:**

- Complete the AW-02A encasement valve repair and pressure testing
- Complete the AY-101 and AY-102 UT examinations
- Complete the AN-107, AW-103, AY-101 and AY-102 primary videos
- Complete the AN-106 and AY-101 annulus videos.

## **IV. Issues**

- None.

**Milestone M-23-00, Tank Integrity and Monitoring****I. Near-Term Deliverables:**

- Develop work packages to perform assessment of 241-BY-ITS-1.

**II. Significant Accomplishments:**

- Completed video observation and liquid level assessment for 241-AX-IX, 241-AX-151, 241-BY-ITS-2

**III. Significant Planned Actions in the Next Six Months:**

M-23-26 requires completing liquid level assessments and video observation of 241-AX-IX, 241-AX-151, 241-BY-ITS-1 and 241-BY-ITS-2 facilities no later than December 31, 2006. In the next three months the field work for the last facility (241-BY-ITS-1) will be completed.

**IV. Issues**

- Nothing to report.

**Interim Stabilization Consent Decree****I. Near-Term Deliverables:**

- **D-001-00, Complete Interim Stabilization of all 29 SSTs**

Due: 09/30/04

Status: Completed on 03/18/04 with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree; these two tanks are undergoing retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations.

**II. Significant Accomplishments:**

- None

**III. Significant Planned Actions in the Next 6 Months:**

- None

**IV. Issues**

- None

## In Tank Characterization and Summary

For the period from October 1 - October 31, 2006

### I. Accomplishments:

- Completed 241-SY-102 TSAP, RPP-PLAN-31588, Rev. 0, *Tank 241-SY-102 Grab Sampling and Analysis Plan: Corrosion Mitigation and Transfer Support*, on October 30, 2006.
- Completed 241-S-102 TSAP, RPP-20248, *Tank 241-S-102 Grab Sampling and Analysis Plan during Retrieval Operations*, on October 31, 2006.

### II. Planned Action within the next Six Months:

#### Tank Sampling

- Leak detection pit 241-SY-103C grab samples scheduled for November 2006.
- Tank 241-S-112 solid closure samples scheduled for December 2006.
- Tank 241-AW-102 liquid evaporator samples scheduled for November 2006.
- Tank 241-C-204 solid closure samples scheduled for December 2006.
- Tank 241-S-102 liquid retrieval samples scheduled for January 2007.
- Tank 241-SY-102 liquid grab samples scheduled for January 2007.
- Tank 241-AY-101 core corrosion samples scheduled for November 2006.
- Tank 241-SY-103 core corrosion samples scheduled for February 2007.
- Tank 241-AP-102 liquid corrosion samples scheduled for February 2007.
- Tank 241-SY-102 liquid grab samples scheduled for March 2007.
- Tank 241-SY-101 core corrosion samples scheduled for April 2007.
- Tank 241-S-102 liquid grab samples scheduled for March 2007.
- Tank 241-AP-107 liquid evaporator samples scheduled for May 2007.

#### BBI Updates

- A total of 17 BBI updates were completed for the 4<sup>th</sup> quarter of FY 2006. Publishing to the BBI will take place after ORP approval.
- A total of 15 BBI updates are planned for the first quarter of FY 2007.

#### DQO

- Complete SST Closure DQO Rev. 3 November 2006
- Complete Corrosion Probe DQO, Rev 0, in November 2006.
- Complete Evaporator DQO, Rev. 5 in March 2007.
- Complete Compatibility DQO, Rev. 12 in December 2006.



- Complete Bulk Vitrification DQO, Rev. 1 in 2007.

### **III. Issues:**

- None.

**Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications.**

**I. Near-Term Deliverables:**

- **M-20-56, Submit Canister Storage Facility Part B Permit Application**  
Due: 6/30/03  
Status: **Complete.**
- **M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology**  
Due: 6/30/03  
Status: **Complete.**
- **M-90-09-T01, Complete Detailed Design of ILAW Disposal Facility Critical Systems to 80%**  
Due: 5/30/03  
Status: **Complete.**
- **M-90-08, Initiate ILAW Disposal Facility Construction**  
Due: 2/28/05  
Status: **Complete.**

**Out year (Post 2006) milestones:**

- **M-90-10, Ready To Accept Placement of ILAW Waste in ILAW Disposal Facility.**  
Due: 8/31/08  
Status: On schedule.
- **M-90-11, Complete Canister Storage Facility Construction**  
Due: 8/31/10  
Status: To be renegotiated to align with WTP schedule.

**II. Significant Accomplishments:**

- IQRPE certified the IDF construction installation.

**III. Significant Planned Actions in the Next Six Months:**

- Submit IQRPE Report to Ecology – November 2006.
- Ecology will develop an Agency Initiated modification of the IDF Permit for Custodial Care Phase Requirements – November 2006.
- Submit IDF Permit Modification Incorporating As Built Design Media to Ecology – December 2006.
- Plant sagebrush on the Hanford Site as called for in Mitigation Action Plan – December 2006.
- Submit to Ecology the ILAW Waste Form Technical Requirements Document (IWTRD) – January 2007.

**IV. Issues**

- None.

(IRP) associated with the EFRT comments. Since many of the EFRT issues involve the PT facility it is critical that these issues be resolved as quickly as possible so that engineering activities can resume engineering activities with the confidence that their work has a sound technical basis. Hydrogen in Piping and Ancillary Vessels (HPAV) issues have been resolved except for the longitudinal loads that result from a hydrogen detonation within the piping system. These loads are being assessed with the assistance of a consultant and are expected to significantly increase the loading on pipe supports and may increase the loading on vessel nozzles. As a result of these efforts, PT engineering has fallen behind schedule.

The recommendations provided by the EFRT combined with the changes that have been required to mitigate the HPAV issues have increased the number of controls and quantity of piping and wiring that must be accommodated on the control racks. One of the issues involves the detection and minimization of simultaneous Pulse Jet Mixers (PJM) overblow or Multiple Overblow (MOB). The testing contractor is preparing the test apparatus for the first test and is working through scaling issues so that the results from the MOB tests can be applied to the actual vessels. The scaling factors have been developed by a BNI subcontractor and the Bechtel San Francisco office has approved these factors. Test instructions are being prepared and a shakedown test of the test apparatus is now underway in preparation for start of testing in December.

BNI recommended that the baseline cesium ion exchange resin be changed from Superlig 644 to spherical resorcinol formaldehyde (RF). ORP is generally supportive of their recommendation but found the supporting documentation for the recommendation needed further development. BNI should complete the work necessary to establish that RF is equivalent to or better than Superlig 644 by the end of November 2006.

Mechanical Handling completed the factory acceptance test for the Hot Cell bridge crane and manipulators that will be used for all remote operations within the Hot Cell. The test showed that the crane met the project requirements with minor exceptions. Following the acceptance testing BNI ran the crane and manipulators with the WTP software package. They found that they were having some difficulty aligning the manipulators with the flexible jumper connectors due to the way that the manipulators and its controls had been specified. More detailed tests are being planned for a period of time following the factory acceptance test for the Filter Cave crane. There is a possibility that the manipulator design will have to be modified to enable efficient use of the crane and manipulators and these tests should provide information that will allow BNI to make this decision.

Construction was suspended in December 2005 with minor exceptions. Four stair ways up to the 56 foot elevation are being installed as well as some minor stairways within the building. These permanent stairways will take the place of the scaffolding stair towers that have been put in place as construction

## **Hanford Waste Treatment and Immobilization Plant (WTP) Project**

### **Pretreatment (PT) Facility**

The PT Facility will separate the radioactive tank waste into High Level Waste (HLW) and Low Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Facility construction began November 2002 and the May 2006 Estimate at Completion (EAC) lists a construction completion date of October 2014. Currently the design is 63% complete and construction is 24% complete.

The primary focus for the Pretreatment facility during this quarter has been on resolving issues such as revised ground motion, External Flow-sheet Review Team (EFRT) findings, and preparing for a Defense Contract Audit Agency (DCMA) Earned Value Management System (EVMS) certification audit in November.

Engineering completed their input to the schedule for re-sequencing the construction of the WTP facilities. The Low Activity Waste facility, Laboratory, and Balance of Facilities will now continue working next year rather than curtailing work as planned in the May 2006 estimate at completion. This approach will allow PT time to work through the issues that were raised primarily by the EFRT, resolving the seismic design issues and holds imposed by Congress, and build a back log of design in preparation for resumption of construction. When preparing the re-sequencing schedule BNI shifted the Pretreatment activities out in time as a block without changing the internal relationships. Therefore there is an opportunity for PT to optimize the schedule and hopefully be able to find ways to reduce the eight month slip to the schedule that resulted from re-sequencing. In addition, the re-sequencing effort schedule that was completed by BNI does take into account the additional work associated with resolving the issues raised by the EFRT. BNI will submit a trend to add this scope of work in the near future.

Civil/Structural engineering continues to work on the concrete walls and slabs and structural steel above the 56' elevation. These activities are being impacted by the change in priorities due to the re-sequencing effort. Other facilities have a higher priority and therefore BNI has moved the engineers to work on them. BNI continues to have difficulties obtaining engineers to replace those that have left the job.

Mechanical Systems and Plant Design continue checking the design for piping and pipe supports that had been released for fabrication prior to the seismic design criteria change. They are also consolidating the requirement changes that will impact vessels and piping systems as a result of the EFTR and Hydrogen in Piping and Ancillary Vessels (HPAV) issues. Plant design has checked 3,259 isometric drawings out of 10,432 drawings that that need to be checked as a result of the revised ground motion requirements. Mechanical Systems has been deeply involved in development of the Issue Response Plans

advanced. The installation of permanent stairways will improve the safety of the facility now and after construction is resumed.

Commodity	Installed during this period	Installed to date	Percentage installed to date
Concrete	0	77.11	68.83%
Structural Steel	-14	2,963.00	18.15%
Pipe	-.96	36.92	6.79%
HVAC	0	37.89	2.20%
Cable Tray	0	0.34	0.94%
Conduit	0	17.13	8.65%
Cable & Wire	0	0.00	0.00%

Facility	Milestone	Scheduled	Projected
PT	Complete Civil/Structural calculations for 56' elevation, Column lines 8-17.	11/06	11/06
	Recommend use of RF resin as baseline for ion exchange.	01/07	9/06A

### High Level Waste (HLW) Vitrification Facility

HLW Construction has been suspended since January 2006. The only ongoing construction activity has been the application of special protective coatings for Concrete slab and walls at el. (-) 21'-0".

In July, a W12 x 58 beam was incorrectly marked for removal and was subsequently cut through at each end. The resulting root cause analysis (RCA) and human performance improvement (HPI) reviews were compared and a number of different causes were noted. From the RCA, the major cause appeared to be a lack of a written process for performing the work. The HPI investigation concluded that the broader construction site work process did not ensure work was performed safely nor ensure supervisors could perform their roles effectively. BNI has implemented a series of changes to avert similar problems from occurring in the future.

Engineering is ongoing in the following key areas:

Seismic analysis of the HLW facility is being re-run to incorporate the stiffening of roof steel structures to reduce the high seismic accelerations resulted from the

last run incorporating the Revised ground Motion (RGM). Re-design of concrete slabs at 0'-0" and walls till 14'-0" incorporating the RGM. Revised calculations and drawings for the embedments at 0'-0" slab have been issued. This allows the initiation of embedded plate procurement. Currently, the vendor shop has a backlog of more than 20 weeks for the delivery of embedded plate and structural steel.

All the P&ID drawings for HLW have been issued as committed system design packages. Engineering review of the equipment layout drawing for elevation 58' has been completed.

New design criteria and desk instructions have been developed to resolve the Technical issues with the piping "Joggles". In addition, piping and instrumentation (P&ID) drawings incorporating new joggle numbers have been issued, and re-tagging of Joggles in the 3-D equipment Model at elevations +37' and +58' has been completed. Less than 15 installed joggles could require additional shadow shielding, if the ongoing inspections and analyses are not able to prove these joggles are adequate.

Both HLW and PT Engineering have obtained additional personnel from various BNI offices to support the critical design efforts.

Implementation of the Corrective Actions required for the Commercial Grade Dedication (CGD) concerns, BNI has been developing the updated CGD process for the canister lid welder and Thermal Catalytic Oxidizer (TCO) systems, which would delay these procurements.

BNI has been in the process of reviewing and revising 134 engineering, procurement and construction procedures affecting safety and Quality as part of the Nuclear Quality & Safety Imperative (NSQI). Affected procedure revision is scheduled to be completed in March 2007. Improvement in the training program and implementation is scheduled to be completed in May 2007.

The State of Washington Department of Ecology released the draft of the new dangerous waste permit for 45-day public review and comment on October 5, 2006, which modified the DOE-submitted package. ORP and BNI are in the process of reviewing it. ORP had requested and received an extension of the comment period to January 27, 2007.

Current plan for the next quarter is to Issue rebar calculations for the slab at 0 ft elevation and walls from 0 ft to 14 ft elevation; Issue the steel design for the main frame for +14 ft elevation; and issue the detailed piping design for the HLW Concentrate Receipt System. In addition, the resequencing plan to absorb the construction stoppage at PT and HLW, which, in turn provides a need and opportunity to complete the construction of LAW early, will be completed in the 1<sup>st</sup>/2<sup>nd</sup> quarter of 2007.



- **M-62-03, Submit DOE Petition for RCRA Delisting or Vitrified HLW.**  
Due: 12/31/2006  
Status: On Schedule. DOE has decided to submit the petition on schedule

## **Low Activity Waste (LAW) Vitrification Facility**

### **Engineering**

The Engineering organization continues to lose personnel while experiencing difficulties in obtaining replacements. The availability of jobs in higher paying markets and closer to major Bechtel offices is hampering the ability to obtain additional experienced personnel. Obtaining Engineering personnel either from outside sources or internally will be a major challenge for BNI. The sooner sufficient Engineering staff can be assigned to the three facilities the higher the likelihood that the construction completion date can be met. BNI Engineering has committed to supply the Engineering staff necessary to support the design work necessary to complete the design that allow LAW, BoF and Lab construction to continue in FY07. LAW, BoF and LAB Engineering needs has priority over HLW Engineering needs.

The long awaited fire test of the W14X90 column with intumescent coating was performed on 5 Oct 2006. All three W14X90 samples failed the test. BNI will remove intumescent coatings from the facility's W14X90 columns and install cementitious coating.

LAW Construction is being hampered by several issues which are preventing the ordering of components, and the delivery and receipt of components. Processes and procedures for the Commercial Grade Dedication (CGD) of material are taking longer to prepare and are more difficult to implement than was expected. A new CGD procedure has been implemented but the magnitude of the material being ordered using CGD and the time required to comply with CGD will impact the project schedule.

Embeds were designed and located in the facility prior to having complete fabricator data to support the needs of Construction to place concrete. This has resulted in some instances where transition frames (which are used to connect attachment points to embeds) must be ordered. BNI is currently preparing a material requisition for transition frames but the first delivery is not expected until early next year.

Civil Engineering support required to support the design of structures and resolve ongoing construction issues does not meet the needs to support the construction schedule. Civil Engineers, Mechanical Engineers and Plant Design Engineers are in demand across all WTP facilities. BNI is working to obtain addition on-site and off-site resources to meet Engineering and Construction demands.

LAW Engineering has been requested to evaluate accelerating the procurement of material. LAW is currently experiencing a large schedule variance for material. These actions will also support the implementation of continued construction of the LAW facility in FY2007 if a formal request is provided by ORP.

### Construction

All siding and roofing has been installed on the facility. Downspouts are currently being installed. Electrical ducting and the elevator pit are being installed to support future construction of the annex north of the main facility.

Installation of major components, walkways and coatings is progressing on the container export lines. Rail soles plates and personnel walkways are being installed in the export bay. Personnel walkways and shield doors are being installed outside of the export bay.

The container export bay shield wall has been placed. This wall will protect personnel in the container export bay from ILAW container direct shine.

The 125 ton exhaust stack has been installed increasing the height of the facility from 68' to 195'.

Construction continues to be hampered due to the availability of material. In the last two weeks BNI has been able to clear approximately 200 valves from the Commercial Grade Dedication (CGD) process but only 40 of those valves have been released to fabricators or to construction. BNI's material control processes are slow and tedious. Acceleration of the LAW construction will be difficult if BNI is not able to obtain, receive and issue material in a more expeditious manner.

C2 Ventilation system air handling units are being installed on the 48' level. During facility operations these units will provide ventilation for most of the LAW facility.

Piping and hanger installation is proceeding on the -21' and 3' levels. Scheduled conduit is being installed on the -21' level. Air handling units are being staged and their associated sheet metal is being installed on the 48' level. Steel decking is being installed north of the north container export line. Equipment support steel is being installed in the north container export bay. Material is being staged on the 28' level for glove and decontamination boxes. Ventilation ducting is being installed at the 3' and 28' level. Stack ducting is being installed at the -21' and 3' level. Ducting installation and steel work is proceeding on the stack which is located in a horizontal position on the west side of the facility. Fireproofing is being installed on the 3', 28', and 48' levels. Fire protection piping is being installed on the 48' level. Roof sheeting (the last layer for the roof) is being installed on the north and south sides. The third tier of siding is being installed on the facility's north wall. Concrete placement forms are being installed on the container export bay walls to support concrete placement. Siding installation is complete on the west side of the facility.

### **Analytical Laboratory (LAB)**

BNI Procurement has sent nine trailers to Paxton Vierling, the steel fabricator, to minimize the steel shipment impact due to limited storage space for steel that has been painted. The trailers will allow the painted steel to be loaded for shipment and eliminate the need to double handle the steel. When the documentation package for the steel is complete and BNI has approved it the steel can be shipped to the WTP Marshalling Yard.

475 tons of Lab structural steel has been received on site. Steel erection is scheduled to start the beginning of December.

C3 and C5 cell coating wall preparation is progressing. Cell C2/C3 structural steel has been installed. Column lines are being marked and backfill is continuing in support of erecting structural steel. Construction forces have performed cement finish work inside the hot cell and have welded the beam clips in the C5 cell.

### **Balance of Facilities (BOF)**

BNI Field Engineering and BoF Construction have developed an approach to resolve the piping slope issues with the underground LAW piping south of Pretreatment. This piping must have a minimum 0.5% negative slope to ensure any leakage is returned to Pretreatment. Several pipes were found to have slopes less than 0.5%. The pipe with the worse slope, a 0.345% positive slope is the test pipe for the proposed repair process. BoF Construction will be cutting the internal pressurized piping and the external containment pipe at two locations and rotating the pipe through two axes. BNI Field Engineering has determined

Facility	Milestone	Scheduled	Projected
BOF & LAB	LAB-Complete Installation of Basemat and In-slab Pipe	07/06	09/06A
	LAB-Complete Civil & Structural Engineering	10/06	10/06
	LAB-Initiate Structural Steel Installation	08/06	10/06
	BOF-Complete Electrical Engineering Chiller compressor Plant	10/06	10/06
	BOF-Complete Electrical Engineering Water Treatment Facility	11/06	11/06
	BOF-Delivery of Glass Former Facility Bins/Silos/Steel	10/06	10/06

that this approach will allow the pipe to have sufficient slope to meet minimum slope requirements.

Fit-up of the WTP discharge line to the Hanford Site Liquid Effluent Retention Facility on the NW side of the WTP site has been completed.

BOF Engineering has a letter from the manufacturer of the piping fabricator applied shrink wrap stating that the wrap-glue combination is acceptable for use. The maximum operating temperature for the shrink wrap is conservative and is approximately 80F lower than the softening point for the adhesive. Soil stresses are an important consideration as the operating temperature of a pipeline approaches the datasheet maximum operating temperature. Since the WTP underground piping contains expansion loops soil stress will likely not become a problem. The ½" annular space also provides additional insulation between the inside transfer pipe and the containment piping. The soil around the containment piping acts as a thermal heat sink.

The basemat for the Glass Former Storage Facility has been placed, requiring about 1000CY of air entrained concrete. This type of concrete is used when a structure is not installed and the concrete will be exposed to the weather.

BOF construction forces are continuing the installation of 16" and 12" pipe and electrical conduit for the Chiller Compressor Plant. Sub-contractors continue the installation of electrical i.e. lights, conduit, panels etc Chiller Compressor. LERF line fit-up is complete and is scheduled for testing today. Construction forces are prefabricating Important to Safety (ITS) air piping for installation between Pretreatment and HLW. Concrete placement forms and electrical conduit duct bank are being installed north of the LAW facility for the LAW Annex. Piping and hanger installation continues between the water tanks and the Water Treatment Facility. Piping and hanger installation continues between the water tanks and the Water Treatment Facility. Anchor bolts and top mat rebar installation is proceeding for the Glass Former Facility foundation. Conduit installation is continuing in the Cooling Tower Facility.

#### Balance of Facilities Construction Completion Status

Facility	Engineering % Complete	Construction % Complete	Scheduled Completion Date	Value \$k
1.05 Balance of Facilities Common Scope	81%	19%	JUL 2014	\$219,588
1.5A Site Work	90%	48%	JUL 2014	\$95,616

1.5B Administration Building (convert from temp)	5%	0%	JUL 2014	\$5,473
1.5C Cooling Tower Facility	99%	97%	OCT 2006	\$6,800
1.5D Fire Water Pump House Facility	97%	96%	OCT 2007	\$1,313
1.5E Fuel Oil Facility	99%	91%	NOV 2006	\$1,196
1.5F Diesel Generators Facility	53%	0%	NOV 2011	\$5,254
1.5G Glass Former Storage Facility	82%	1%	SEP 2010	\$8,321
1.5H Guard House Facility	100%	100%	COMPLETE	\$7
1.5J Chiller Compressor Plant	100%	64%	JUN 2008	\$22,174
1.5K Steam Plant Facility	99%	98%	SEP 2008	\$8,516
1.5L Wet Chemical Storage Facility	57%	0%	DEC 2013	\$4,498
1.5M Water Treatment Building	94%	65%	MAY 2007	\$7,028
1.5N Non-Dangerous, Non-Radioactive Effluent Facility	74%	77%	OCT 2007	\$1,507
1.5P Switchgear Building	92%	78%	APR 2011	\$5,993
1.5Q ITS Switchgear Building	76%	18%	FEB 2012	\$4,998
1.5S Erected Tanks - Process/Potable	100%	99%	FEB 2007	\$5,216
1.5T Failed Melter Storage	14%	0%	APR 2010	\$1,608
1.5V BOF Switchgear Building	90%	77%	APR 2011	\$5,593
1.5Y Simulator Facility	95%	84%	AUG 2010	\$14,940
1.5Z Anhydrous Ammonia	9%	0%	SEP 2008	\$1,579

**Significant Planned Actions (next six months):**

Facility	Milestone	Scheduled	Projected
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**Milestone M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes.****I. Near-Term Deliverables:**

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes.**  
Due: 12/31/2028  
Status: At Risk – DOE is currently evaluating WTP cost and schedule information.
- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes.**  
Due: 02/28/2018  
Status: At Risk
- **M-62-01M, Submit Semi-Annual Project Compliance Report.**  
Due: 07/31/2006  
Status: Completed
- **M-62-01N, Submit Semi-Annual Project Compliance Report.**  
Due: 01/31/2007  
Status: On Schedule
- **M-62-01O, Submit Semi-Annual Project Compliance Report.**  
Due: 07/31/2007  
Status: On Schedule
- **M-62-03, Submit DOE Petition for RCRA Delisting or Vitrified HLW.**  
Due: 12/31/2006  
Status: On Schedule. DOE has verbally requested a delay in submitting the Petition pending negotiations of other WTP milestones. A Change request is being prepared by ORP.
- **M-62-07B, Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So That It Is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A200 as Part of DOE Contract No. DEAC27-01RV14136), and Complete Schedule Activity ID 4DH46102A2 – Move #1 Melter into the High Level Waste Vitrification Facility.**  
Due: 12/31/2007  
Status: Unrecoverable



- **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle.**

Due: 06/30/2006

Status: Missed – Insufficient information to compare technologies due to delays in constructing the Demonstration Bulk Vitrification System (DBVS) and lack of WTP cost and schedule information.

**1. Significant Accomplishments:**

2. Planning for FY2007 integrated dryer/38D full-scale melt testing was started.
3. The Preliminary Documented Safety Analysis (PDSA) was submitted for ORP review on October 19.
4. 130-liter scale dryer testing was completed at Littleford Day.

**5. Significant Planned Actions in the Next Six Months:**

- Complete ORP review of the PDSA.
- Develop Project Improvement Plan to address technical issues and areas of concern identified by the Expert Review Panel.
- Continue preparation for the integrated dryer and melter test.

**6. Issues:**

The DBVS facility design and/or cost and schedule baselines will require modification to incorporate resolution of issues identified by the Expert Review Panel.

- **M-62-09, Start Cold Commissioning – Waste Treatment Plant.**

Due: 02/28/2009

Status: Unrecoverable

- **M-62-10, Complete Hot Commissioning – Waste Treatment Plant.**

Due: 01/31/2011

Status: Unrecoverable

- **M-62-11, Submit a Final Hanford Tank Waste Treatment Baseline.**

Due: 06/30/2007

Status: Unrecoverable. Delays in M-62-08 will cause delays in this milestone.

**II. Significant Accomplishments:**

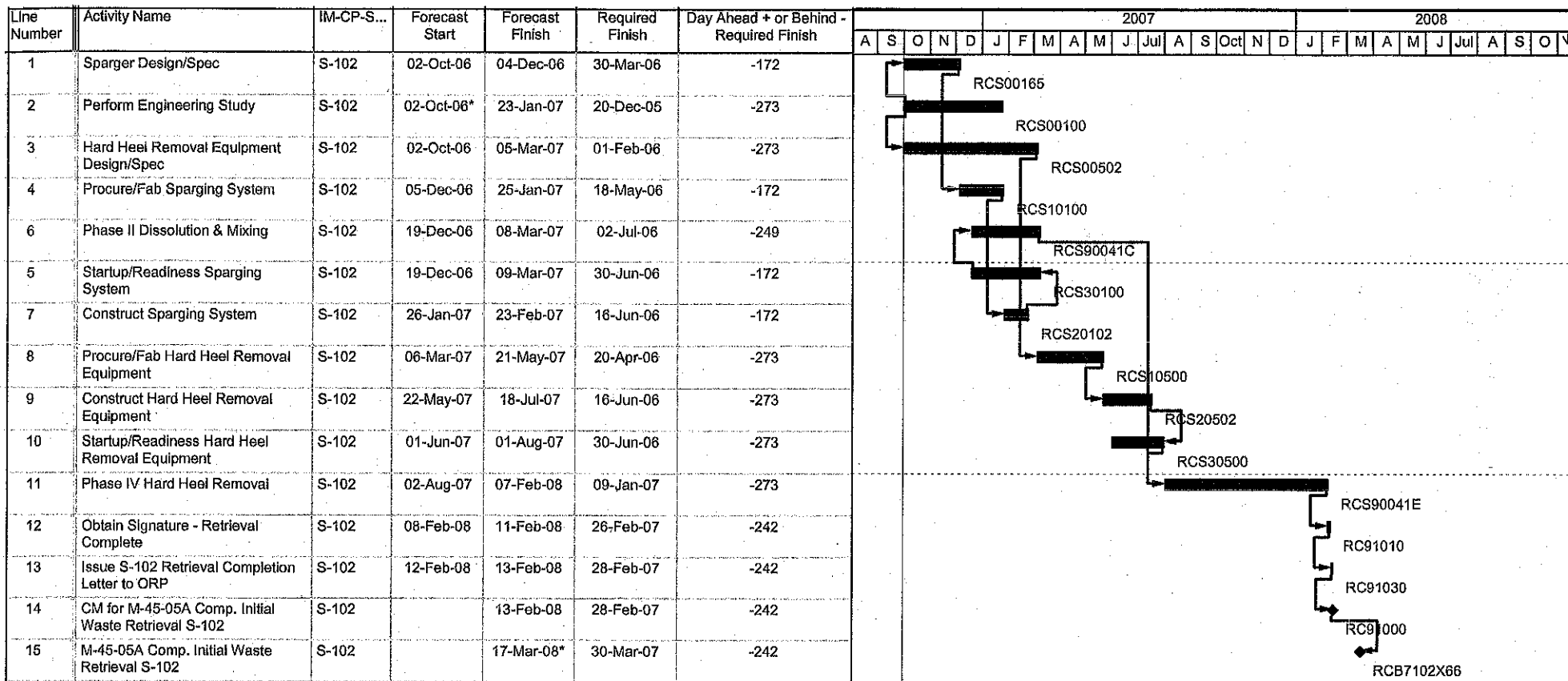
- None

**III. Significant Planned Actions in the Next Six Months:**

- None

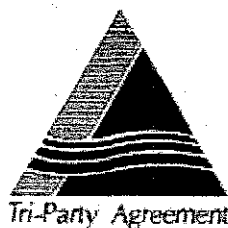
**IV. Issues:**

None



Start Date: 01-May-99  
 Finish Date: 20-Aug-15  
 Data Date: 01-Oct-06  
 Run Date: 11-Oct-06

Critical Path for TPA  
 Milestone M-45-05A  
 "Complete Initial Waste Retrieval from Tank"



## Agenda November 16, 2006

**Office of River Protection**  
**Quarterly Milestone Review Meeting**  
 Ecology Conference Room 3A, 3100 Port of Benton Blvd., Richland

**Chairperson: Jane Hedges**

9:00 a.m. – 11:30 a.m.

Topic	Leads	Time
<ul style="list-style-type: none"> <li>TPA Milestone Statistics</li> <li>FY 2006 ORP TPA Cost &amp; Schedule Performance (CHG)</li> </ul>	Woody Russell / Suzanne Dahl / Jeff Lyon	9:00
M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:10
M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:40
M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Diane Clark / Les Fort	10:00
M-48-00, DST Integrity Assessment Program	Cathy Louie / Vic Callahan / Les Fort	10:10
M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Cathy Louie / Bud Derrick	10:20
<b>BREAK</b>		
M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
In Tank Characterization and Summary	John Long / Michael Barnes	10:40
M-62-08 Bulk Vittrification/Supplemental Technologies	Jim Thompson/Suzanne Dahl	10:50
BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vittrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Suzanne Dahl	11:10

**Sign In Sheet**  
**Quarterly TPA Program Manager's Meeting**  
**November 16, 2006 - Ecology**

NAME	ORG	MSIN	PHONE	MINUTES (Y/N)
Woody Russell	ORP	H6-60	373-5227	Y
Rick Engelmann	FH	H8-12	376-7485	Y
Rob PIRRO	FH	"	373-3235	Y
Sharon Braswell	ORP	H6-60	376-8503	Y
Tom Potts	EPA	-	376-6623	Y
Nancy Igenklo	Ecol			Y
Suzanne Dahl	Ecology			
Jess Voigt	CHG	H6-60	373-4101	Y
LES FORT	ECY		373-7984	Y
Nick CETO	EPA		376-9529	<del>Y</del> N
Sonya Moore	FH	H8-40	372-3320	
Melinda J Brawn	ECY		372-7886	Y
Roger Gunters	ORP	H6-60	373-0421	Y
R.E. Raymond	CH2		372-8767	
C.S. Louie	ORP	H6-60	376-6834	Y
K. Boomer	CH2	H6-59	372-3629	Y
TJ Lyon	ECY		372-7914	Y
JOE CAGGIANO	ECY	H6-57	372-7915	N
Cheryl Whalen	ECY		372-7972	Y
Nike Barnes	ECY		372-7924	N
Lori Hoffman	ORP	H6-60	376-6104	N
John Kriskofski	CH2		373-4225	N

## November 16, 2006 - Ecology

[illegible]